

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

2S21
A75U69

S

4898

4814383.

cop. 3

MICRO-ORGANISM CULTURE COLLECTIONS:

ACRONYMS, SIGLA, AND ABBREVIATIONS

U.S. DEPT. OF AGRICULTURE
NATIONAL AGRIC. LIBRARY
JUN 16 '82

Preface

This study, and compilation, was made as part of the investigations being conducted at the Northern Regional Research Center, Agricultural Research Service, U.S. Department of Agriculture, Peoria, Ill.

The Agricultural Research Culture Collection (with siglum NRRL) maintained here is one of the world's largest and most complete collections of agriculturally and industrially important bacteria, yeast, molds, and aerobic actinomycetes. This collection serves as a source of authentic micro-organisms for the fermentative production of organic acids, vitamins, antibiotics, enzymes, feeds, beverages, and foods.

Also, it serves as a repository for strains concerned with patent applications. It is a source of micro-organisms of value in studies on the pollution control, health, and energy aspects of the Department's research in these areas. It provides scientific information for improvements in the post-harvest sector of American agriculture, which includes technology affecting handling, storing, processing, and distributing of major farm products. Research in this complex technology provides the basis for preserving and increasing food quantity, economy, quality, safety, and nutritive value. This research also provides knowledge for producing alternative fuels, such as alcohol, from agricultural materials.

The subjects of research at the Center include the components of corn, wheat, grain sorghum, oats, soybeans, and horticultural and special crops. In the newest dimension of the Center's program, added weight is being given to studies on photosynthesis, nitrogen fixation, and plant tissue culture.

Contents

Introduction	1
Literature cited	4

This study, and compilation,
is a revision of ARS-NC-17
"Micro-Organism Culture Collections:
Acronyms and Abbreviations,"
June 1974.

Published by Agricultural Research Service
North Central Region
U.S. Department of Agriculture
2000 W. Pioneer Parkway
Peoria, Illinois 61615

Library of Congress
ISSN 0193-3787

MICRO-ORGANISM CULTURE COLLECTIONS: ACRONYMS, SIGLA, AND ABBREVIATIONS

Thomas G. Pridham¹

Introduction

A most important aspect of collecting living micro-organisms involves recording histories or chronicling of many strains. In chronicling, designating strains of micro-organisms by an acronym, siglum, or abbreviation and number is necessary for an orderly arrangement of thousands of strains currently under study in many laboratories. Chronicling also provides an accurate reference for future students who will collate the results of research conducted with these materials. Many of the strains now under study will be adequately preserved for some time. Accurate, original designation and identity of that designation with progeny, descendants, or subcultures of particular strains are critical.

Unfortunately, some of the early researchers either recognized no need for strain designations, or they believed it unnecessary. Some modern-day microbiologists still follow this pattern. Comprehending many reports on micro-organisms is difficult because of omissions in strain designations, omissions of characterizations of the strains under study, and lack of adequate provisions for preserving strains.

Lack of providing adequate preservation, of course, was no real fault of the early workers because some of the knowledge in this area, such as lyophilization or liquid nitrogen preservation, had not been obtained yet. Publications on *Streptomyces albus* (Rossi Doria), Waksman and Henrici, 1943, are adequate examples where neglect of assigning acronyms, sigla, or abbreviations and strain numbers, and inability to preserve strains, has led to much confusion. Numerous contributions exist on one or more functions of *Stm. albus* where no designation or any kind of formal characterization is given and no strains are preserved. With the knowledge that the name appears to have been applied to at least two different kinds of streptomycetes, the uncertainties are evident that arise in attempting to collate and to generalize about functions or characteristics of this species (14, 17).

¹Head, Agricultural Research Culture Collection (NRRL), Northern Regional Research Center, Agricultural Research Service, U.S. Department of Agriculture, 1815 N. University St., Peoria, Ill. 61604.

Hundreds of different collections of micro-organisms are known throughout the world, each with its own numbering system. Many of these collections maintain progeny of the same original strains obtained either from the person who first isolated the micro-organism or secondhand through culture collection exchange agreements and purchases. Thus, progeny of the same strain is available under many different designations.

To more precisely identify such progenies, the acronym, abbreviation, or siglum of the collection where they are maintained serves as a prefix for the number. For example, NRRL 2209 is the siglum and strain number of progeny of *Stm. aureofaciens* Duggar 1948, strain Lederle A-377, maintained in the Agricultural Research Culture Collection (NRRL) of the Northern Regional Research Center. The siglum, NRRL, now is known among culture collection specialists to refer to the Agricultural Research Culture Collection. The strain number 2209 indicates that this strain was the 2,209 one to be accessioned into the permanent mold collection.

Although streptomycetes are known to be bacteria, at the time of accessioning that issue was cloudy, and the decision was made to include U.S. patent deposition strains of streptomycetes in the permanent mold collection. This strain was the first patent deposition strain accessioned in the ARS Culture Collection in connection with a U.S. patent application.

Only an accurate and complete chronicle can reveal the original identity of many strains, each of which carries many different designations. The extent depends only upon the number of different collections that have acquired progeny of the micro-organism. For example, the original strain designation of *Stm. aureofaciens* was Lederle A-377. Thus, Lederle A-377 and NRRL 2209 are designations for progeny of the same strain.

As another example, *Streptovercillium abikoense* (Umezawa and others) Locci and others 1969 is a proposed species whose type strain originally was numbered Z-1-6 at the National Institute of Health of Japan (NIHJ). Therefore, the original strain designation was NIHJ Z-1-6. Progenies of this strain now carry the following different sigla, acronyms, and numbers, among others: ATCC 12766 (American Type Culture Collection), IMRU 3654 (Waksman Institute of Microbiology, Rutgers University), NRRL B-2133 (Northern Regional Research Center). Theoretically, cultures designated by these sigla, acronyms, and numbers all should exhibit the same characteristics, provided they have been maintained properly, and variations encountered among the various and sundry criteria used for characterization and description are considered.

Many culture collections are located throughout the world, some quite reliable, others less so. To prepare the "World Directory of Collections of Microorganisms," 800 collections were solicited for information (15).

Unfortunately, the acronyms, sigla, or abbreviations for the collections listed were not included. Information of this kind may be obtained by perusing many different culture collection catalogs, but none provides a complete list. Accordingly, the purpose of this bulletin is to provide the most complete listing to date.

The list should be of value to culture collection personnel and researchers desiring precise information on strains they are studying or the location of collections where particular strains may be obtained. Although complete addresses for some collections are not available, enough information is given, along with additional references (7, 9, 11), to pursue any leads that may be indicated.

To orient the reader further, pertinent definitions of some terms are given below.

acronym	A shortened form of two or more words, or an entire phrase; generally a word formed from the initial letter of each of the successive parts of a compound term, that is, words made from the tips of other words, preferably pronounceable. Coined in 1943 from the Greek <i>akros</i> , meaning tip, and the Greek <i>onyma</i> , meaning name, hence acronym.
sigla	Signs, abbreviations, letters, or characters standing for words, shorthand, or markings in ancient manuscripts or on coins, medals, and so forth.
aphaeresis	A new word coined by dropping one or more syllables from the first part of the multisyllable word, such as "phone" for "telephone."
apocope	A new word coined by dropping one or more syllables from the last part of the multisyllable word, for example, "kilo" for "kilogram."
portmanteau word	A new word coined by combining the parts of two or more words: "smog" coined from "smoke" and "fog."
individual	A single microbial cell or spore.
clone	In microbiology, a population of cells derived from a single parent cell or individual.
isolate	In microbiology, probably synonymous as a noun with "clone" or with "strain."
strain	The descendants (progeny) of a single isolation (clone or isolate) in pure culture.
culture	A population of microbial cells in a given place at a given time.
substrain	A term that can be applied to separate clones and their progeny obtained in a variety of applied ways from a culture of a particular strain.

Other definitions related to the designations of strains, and which can be used to more precisely modify them, can be found in the International Code of Nomenclature of Bacteria and from other sources (7, 12).

Progress in genetics, genetic engineering, and recombinant DNA technology over the past few years places additional responsibilities on microbiologists so far as precise and proper designations for the microbial materials with which they are working are concerned. Such designations range from gene symbol designations to those concerned with nomenclature of bacterial plasmids (18, 19).

Because the Russians use either English or Cyrillic letters in either English or Russian language publications, acronyms, sigla, and abbreviations for the Russian collections are given in both languages. Where possible, the titles of non-U.S. organizations are translated into English. Thus, the combination of letters originally based on the organization titles in the native languages may not seem to be based on the initial letter of each important component of the title.

Some collections have been abandoned for various reasons, yet their acronyms, sigla, or abbreviations remain in the scientific and patent literature and are included in the list. Some collections listed in the World Directory apparently have no known acronyms, sigla, or abbreviations; in coining one, directors of such collections are advised to study this list carefully to avoid duplication, which could lead to confusion. A number of the acronyms, sigla, and abbreviations listed herein are not included in the Acronyms and Initialisms Directory, a comprehensive listing of acronyms and initialisms covering many fields (3).

Literature Cited

- (1) Ainsworth, G. C., P. W. James, and D. L. Hawksworth.
1971. Ainsworth & Bisby's dictionary of the fungi including the lichens. Sixth edition. 663 p. Commonwealth Mycological Institute, Kew, Surrey, England.
- (2) Bachman, B. J., K. B. Low, and A. L. Taylor.
1976. Recalibrated linkage map of *Escherichia coli* K-12. Bacteriological Reviews 40(1):116-167.
- (3) Crowley, E. T., and R. C. Thomas, editors.
1973. Acronyms and initialisms directory. Fourth edition. 635 p. Gale Research Co., Detroit, Mich.
- (4) Curtis, R., III.
1980. Modified microorganisms and method of preparing and using same. U.S. Patent 4,190,495 (February 26, 1980) (to Research Corporation, New York, and U.S. Department of Health, Education and Welfare).
- (5) Demerec, M., E. A. Adelberg, A. J. Clark, and P. E. Hartman.
1966. A proposal for a uniform nomenclature in bacterial genetics. Genetics 54:61-76.

- (6) Fox, G. E., K. R. Pechman, and C. R. Woese.
1977. Comparative cataloging of 16S ribosomal ribonucleic acid: molecular approach to procaryotic systematics. *International Journal of Systematic Bacteriology* 27(1):44-57.
- (7) Holmgren, P., and W. Keukeu.
1974. *Index herbariorum. Part 1, The herbaria of the world.* Sixth edition. 397 p. (Regnum Vegetabile 92), Utrecht, Holland.
- (8) Johnson, R., M. Rogosa, and M. I. Krichevsky.
1976. Abbreviations of names of genera suggested for coding microbiological data. *International Journal of Systematic Bacteriology* 26(2):278-282.
- (9) Kent, D. H., E. B. Bangerter, and J. E. Lousley.
1957. *British herbaria: an index to the location of herbaria of British vascular plants with biogeographical references to their collectors.* The Botanical Society of the British Isles. London. 101 p.
- (10) Kucsera, G.
1973. Proposal for standardization of the designations used for serotypes of *Erysipelothrix rhusiopathiae* (Migula) Buchanan. *International Journal of Systematic Bacteriology* 23(2):184-188.
- (11) Lanjouw, J., and F. A. Stafleu.
1964. *Index herbariorum. Part 1, The herbaria of the world.* Fifth edition. (Regnum Vegetabile 31), Utrecht, Holland.
- (12) Lapage, S. P., P. H. A. Sneath, E. F. Lessel, V. D. B. Skerman, H. P. R. Seeliger, and W. A. Clark, editors.
1975. *International code of nomenclature of bacteria and statutes of the international committee of systematic bacteriology and statutes of the bacteriology section of the International Association of Microbiological Societies, Bacteriological Code, American Society for Microbiology, Washington, D.C.* 1976 revision.
- (13) Leveritt, W., and V. D. B. Skerman.
1976. Two alternative proposals for abbreviations of names of genera suggested for coding microbiological data. *International Journal of Systematic Bacteriology* 26(4):442-446.
- (14) Lyons, A. J., and T. G. Pridham.
1962. Proposal to designate strain ATCC 3004 (IMRU 3004) as the neotype strain of "*Streptomyces albus*" (Rossi-Doria) Waksman and Henrici. *Journal of Bacteriology* 83:370-380.
- (15) Martin, S. M., and V. D. B. Skerman, editors.
1972. *World directory of collections of cultures of microorganisms.* 560 p. New York.
- (16) Novick, R. P., R. C. Clowes, S. N. Cohen, R. Curtis, III, N. Datta, and S. Falkow.
1976. Uniform nomenclature for bacterial plasmids: a proposal. *Bacteriological Reviews* 40(1):168-189.
- (17) Pridham, T. G., and A. J. Lyons.
1961. "*Streptomyces albus*," (Rossi-Doria) Waksman et Henrici: taxonomic study of strains labeled "*Streptomyces albus*." *Journal of Bacteriology* 81:431-441.
- (18) U.S. Patent and Trademark Office.
1975, 1978. Foreign country key letter code. *Official Gazette, U.S. Patent and Trademark Office* 939(4):1673, 1975; 976(1):19, 1978.
- (19) Wolinsky, E., and W. B. Schaefer.
1973. Proposed numbering scheme for mycobacterial serotypes by agglutination. *International Journal of Systematic Bacteriology* 23(2):182-183.

Acronyms, Sigla, or Abbreviations²

Meaning

AAS	Academy of Agricultural Sciences, Sofia, Bulgaria.
AB	See ABBOTT.
ABBOTT	Abbott Laboratories, North Chicago, Ill. 60064 U.S.A.
ABJ	Association of Brewers of Japan, Tokyo, Japan.
ABT	See ABBOTT.
ACAD	E. C. Smith Herbarium, Acadia University, Wolfville, Nova Scotia, Canada.
ACC	Akers Culture Collection of Imperial Chemical Industries, Ltd., Alderly Park, Macclesfield, Cheshire, England or Welwyn, Hertfordshire, England or Imperial Chemical Industries Limited, London, England. (Formerly BRL or ARL.)
ACM	Archive of Microbial Strains, National University of Tecuman, S.M. Tecuman, Argentina, S.A.
ACR	Department of Bacteriology, University of Wisconsin, Madison, Wis. 53706 U.S.A.
ACRIC	Agricultural College of Research Institute, Coimbatore, India.
ACST	Advisory Committee on the Application of Science and Technology to Development (ECOSOC).
ACTU	Department of Agricultural Chemistry, Faculty of Agriculture, University of Tokyo, 1-1-1 Yayoi, Bunkyo-ku, Tokyo 113 Japan. See FAT and ATU.
AECU	Agricultural Experiment Station, New York College of Agriculture, Cornell University, New York, N.Y. 10001 U.S.A.
AHRC	Arctic Health Research Center, Anchorage, Alaska.
AHTS	Abeno Higher Technical School, Osaka, Japan.
AHU	Laboratory of Culture Collection of Microorganisms, Faculty of Agriculture, Hokkaido University, Nishi-9-chôme, Kita-9-jo, Sapporo City, Japan.
AID	Agency for International Development.
AIMS	See IAMS.
AIU	Faculty of Agriculture, Iwate University, Osaka, Japan.

²Use of single letters, such as "A," "B," "S," is not recommended because single letters often are used informally in laboratories to designate genera: "A" for "actinomycete," "B" for "bacterium" or "Bacillus," "S" for *Saccharomyces* or *Streptomyces*, "P" for *Penicillium*. Three or four letters comprising the acronym, sigla, or abbreviation would be preferable and most convenient.

AJ	Central Research Laboratories, Ajinomoto Company, Inc., 1-1, Suzuki-cho, Kawasaki-ku, Kawasaki, 210 Japan.
AKMI	Department of Technical Microbiology, August Kirchenstein Institute of Microbiology, Latvian Academy of Sciences, 55-Kleisti, Riga, Latvia.
AKU	Faculty of Agriculture, Kyoto University, Kyoto, Japan.
AL	Department of Biochemistry, Research Division, Abbott Laboratories, North Chicago, Ill. 60064 U.S.A.
AMC	Walter Reed Army Medical Center, 6825 16th St. N.W., Washington, D.C. 20013 U.S.A. (Formerly Army Medical Department Research and Graduate school or Army Medical Corp).
AMCY	American Cyanamid Co., Lederle Division, Pearl River, N.Y. 10965 U.S.A. See LED.
AMD	Agricultural Microbiology Division, Ministry of Agriculture, University Street, Orman, Giza, United Arab Republic.
AMERICAN CYANAMID	American Cyanamid Company, New York, N.Y. 10001 U.S.A. See also Lederle.
AMIF	American Meat Institute Foundation, Chicago, Ill. 60607 U.S.A.
AMNF AMNH	American Museum of Natural History, Central Park West and 79th Street, New York, N.Y. 10024 U.S.A.
AMP	Australian Mycological Panel. (Formerly Aust. or SN.)
AMRCC	FAO/WHO International Reference Centre for Animal Mycoplasmas, Institute for Medical Microbiology, University of Aarhus, DK-8000 Aarhus C. Denmark. Also AMRC.
AMS	Army Medical School, Japan (defunct).
ANRL	Australian National Reference Laboratory in Medical Mycology, The Institute of Medical Research, The Royal North Shore Hospital of Sydney, St. Leonards, N.S.W. 2065 Australia.
ANU	Faculty of Agriculture, Niigata University, Japan.
AOU	Faculty of Agriculture, Okayama University, Okayama, Japan.
APQS	Yokohama Animal and Plant Quarantine Station, M.A.F., Kanagawa, Japan.
ARCH	Antibiotics Research Center, Hindustan Antibiotics, Ltd., Pimpri, Poona District, India. See HACC.
ARI (API)	Antibiotics Research Institute, Moscow, U.S.S.R. Also USSR, ARI.

ARIN	Nippon Agricultural Research Institute, Tokyo, Japan. Also RAJ.
ARL	See ACC.
ARMOUR	Armour and Co., Chicago, Ill. 60680. U.S.A.
ARS	Agricultural Research Service, U.S. Department of Agriculture. Washington, D.C. 20250 U.S.A.
ASCA	Department of Agricultural Botany, Faculty of Agriculture, Ain Shams University, Shoubra El Khaima, United Arab Republic.
ASRI	Akimov State Research Institute.
ASS	Agricultural Scientific Services, Department of Agriculture and Fisheries for Scotland, East Craigs, Edinburgh, Scotland.
ATCC	American Type Culture Collection, 12301 Parklawn Drive, Rockville, Md. 20852 U.S.A. (Formerly at 2112 M Street, NW., Washington, D.C. 20037 U.S.A.)
ATU	See ACTU.
AY	Culture Collection, Ayerst Research Laboratories, 1025 Laurentian Blvd., Saint-Laurent, Quebec, Canada.
B	Botanical Museum, Berlin-Dahlem, Germany.
BAARN/DELFT	See CBS.
BAS	Bulgarian Academy of Sciences, Sofia, Bulgaria.
BASEL	W. Vischer Collection, Botanical Institute, University of Basel, Basel, Switzerland.
BATU	Department of Forestry, Institute of Botany, Faculty of Agriculture, University of Tokyo, Tokyo, Japan.
BBI	Biological Institute for Soil and Forestry, Kiel-Kitzeburg, Germany.
BBL	Baltimore Biological Laboratory, Division of Bioquest, Division of Becton, Dickinson and Co., Cockeysville, Md. 21030 U.S.A.
BBLB-D	Biological National Institute for Soil and Forestry, Berlin-Dahlem, Germany.
BCCM	British Commonwealth Collections of Microorganisms, London, England.
BCIRA	British Cotton, Silk, and Man-Made Fibres Research Association, Manchester, England. (Formerly British Cotton Industries Research Association.)
BCMT	Brazilian Collection of Microbial Types, Laboratory of Parasitology, National Faculty of Medicine, University of Brazil, Rio de Janeiro, Brazil, S.A.

BDC	Biology Department, Massachusetts Institute of Technology, Cambridge, Mass. 02139 U.S.A. <i>Also</i> ITC.
BDUN	Botany Department, University of Nottingham, Nottingham, England.
BEECHAM	Beecham Research Laboratories, Brockham Park, Betchworth, Surrey, England.
BEN MAY LAB	Ben May Laboratory for Cancer Research, University of Chicago, 950 E. 59th St., Chicago, Ill. 60637 U.S.A.
BFQM	Bacteriotecca, Faculty of Chemistry, Montevideo, Uruguay, S.A.
BGSC	Bacillus Genetic Stock Center, The Ohio State University, Department of Microbiology, 484 West 12th Avenue, Columbus, Ohio 43210 U.S.A. <i>See also</i> WHO/CCBC.
BI	Culture Collection of Algae, Indiana University, Bloomington, Ind. 47401 U.S.A. Now at Department of Botany, University of Texas, Austin, Tex. 78712 U.S.A.
BIB	Botanical Institute, Berne, Switzerland.
BIG	Botanical Institute, Ernst-Moritz-Arndt-University, Grimmerstrasse 88, Greifswald, East Germany. <i>Also</i> BIU <i>and</i> BIU BIG.
BIHM	Botanical Institute, Hanover Münden, Germany.
BIL	Botanical Institute, Karl Marx University, Talstrasse 33, 701, East Germany.
BIN	V. L. Komarova Botanical Institute, 197022
(БИН)	Leningrad, P-22, ul. prof. Popova, 2, U.S.S.R.
BIOVETA	An agency producing veterinary biologicals, Czechoslovakia.
BIRA	British Leather Research Association, Egham, Surrey, England (probable error; <i>see</i> BLRA).
BIU	<i>See</i> BIG.
BIU BIG	<i>See</i> BIG.
BKM	Department of Type Cultures, Institute of Microbiology, Academy of Sciences, Moscow, U.S.S.R. <i>or</i> All-Union Collection of Microorganisms, Moscow, Profsojuznaja 7, B 133, U.S.S.R. <i>Also</i> BKMF <i>or</i> INMI.
(БКМ)	
BKMF	<i>See</i> BKM.
(БКМФ)	
BLRA	British Leather Research Association, Egham, Surrey, England.
BL	<i>See</i> BRISTOL.
BLUS	Baljevaxtlaboratoriet Lantbruksholan, Uppsala, Sweden.
BM	British Museum of Natural History, London, England.

BMI	Battelle Memorial Institute.
BNFS	B.N.F. Scheme, Poona-5, India.
BO	See BOOTS .
BOOTS, BO or Boots	Culture Collection, Antibiotics and Fermentation Division, Boots Pure Drug Company, Ltd., Daleside Road, Nottingham, England. See also BPD and CUB .
BPD	Research Department, Boots Pure Drug Company, Ltd., Oakfields Road West, Bridgford, Nottingham, England. See BOOTS and CUB .
BPI	Type Culture Collection, Burma Pharmaceutical Industry, Industrial Development Corporation, Ministry of Industry, BPI Road, Gyogon, Rangoon, Burma.
	or
	The National Fungus Collections (formerly Crops Research Division, Plant Industry Station). Now Plant and Entomological Sciences, Beltsville Agricultural Research Center, ARS, USDA, ³ Beltsville, Md. 20705 U.S.A.
BPSP-BK	Beneficencia Portuguesa, San Pablo, Brazil, S.A.
BR	Jardin Botanique (Rijksplantentuin), Brussels, Belgium.
	or
	See BRISTOL .
BRISTOL	Research Division, Bristol Laboratories, Division of Bristol-Meyers Co., P.O. Box 657, Syracuse, N.Y. 13201 U.S.A.
BRL	See ACC . (Formerly Butterwick Research Laboratories, Imperial Chemical Industries, Ltd., Welwyn, Herts, England.)
BS	Botanical Institute, Academy of Sciences, Moscow, U.S.S.R.
(BC)	
BS	Institute of Microbiology, University of Brno, Brno, Czechoslovakia.
	or
	Institute of Microbiology, Masaryk University, Brno, Czechoslovakia.
	or
	Department of Microbiology, Faculty of Natural Sciences, J. E. Purkyne University, Brno, Czechoslovakia.
BSCH	Institute of Bacteriology of Chile, Santiago, Chile, S.A.
BSCU	Botany School, Cambridge University, Cambridge, England.

³Agricultural Research Service, U.S. Department of Agriculture.

BSM	BSM Culture Collection, Botany Department, University of Allahabad, Allahabad, India.
BSOU	Department of Biology, Faculty of Science, Osaka University, Osaka, Japan.
BSRI	Brewing Science Research Institute, Tokyo, Japan. <i>May also be same as GIB or RIB.</i>
BTCC	Bulgarian Type Culture Collection, Institute for State Control of Drugs. Bul. VI Azimov 26, Sofia, Bulgaria.
BTI	Boyce Thompson Institute for Plant Research, 1086 N. Broadway, Yonkers, N.Y. 10701 U.S.A.
BU or BÚ or Bú	Institute of Biology, Ceskoslovenska Akademie Vid., Na cvicisti, Prague, 6, Czechoslovakia. <i>Also BÚČSAV or BÚČSAV (BÚ) or BÚ BÚC- SAV.</i>
	<i>or</i>
BUCSAV	Braun University, Providence, R.I. U.S.A.
BUCSAV (BU)	<i>See BU.</i>
BU BUCSAV	<i>See BU.</i>
BYIC	Berkeley Yeasts Laboratory, Berkeley, Calif. 94701 U.S.A.
C	Botanical Museum and Herbarium, Copenhagen, Denmark.
	<i>or</i>
	Ciba Pharmaceutical Products, Inc., Summit, N.J. 07901 U.S.A. and Basle, Switzerland.
CAES	Chiba Prefecture Agricultural Experiment Sta- tion, Chiba, Japan.
	<i>or</i>
	Chugoku Agricultural Experimental Station, Himeji, Japan.
CAMBR	<i>See CCAP.</i>
CANAD-201	Division of Bacteriology and Dairy Research Science Service, Department of Agriculture, Ottawa, Canada.
CANAD-212	Division of Bioscience, National Research Council, Ottawa, Canada.
CANADA 212 A	<i>See PRL.</i>
CAPM	Collection of Animal Pathogenic Microorga- nisms, Research Institute of Veterinary Medi- cine, Brno-Medlánky, Czechoslovakia.
CASE	Case Laboratories, Chicago, Ill. 60601 U.S.A.
CB	Collection of Basidiomycetes, Institute of Microbiology, Czechoslovak Academy of Sciences, Prague-Krč, Budějovická, Czecho- slovakia.

CBLB	Collection of Bacteriophages and Lysogenic Bacteria, Institute of Biophysics, Czechoslovak Academy of Sciences, Královopolská 135, Brno, Czechoslovakia.
CBRS	Coffee Board Research Station, Mysore, India.
CBS	Centraalbureau voor Schimmelcultures, Oosterstraat 1, Baarn, Netherlands. <i>Also</i> BAARN/DELFT.
CBSC	Carolina Biological Supply Company, Elon College, N.C. 27244 U.S.A.
CC	CSIRO Division of Plant Industry, Canberra City, A.C.T., Australia.
CCAP	Culture Centre of Algae and Protozoa, Botany School, University of Cambridge, 36 Storey's Way, Cambridge, CB3 0DT England. <i>See also</i> CAMBR <i>and</i> CU.
CCBC	Collaborating Center for Biological Control, Ohio State University, Columbus, Ohio 43210 U.S.A.
CCEB	Culture Collection of Entomogenous Bacteria, Department of Insect Pathology, Institute of Entomology, Institute of Biology, Czechoslovak Academy of Sciences, Flemingovo 2, 16609 Prague 6, Czechoslovakia.
CCF	<i>See</i> CCFP.
CCFP	Culture Collection of Fungi, Department of Botany, Faculty of Sciences, Charles University, Benátská 2, Prague 2, Czechoslovakia.
CCH	National Sanatorium, Chubu Central Hospital, Obu, Japan.
CCM	Czechoslovak Collection of Microorganisms, J. E. Purkyně University, tříd Obránců Miru 10, Brno, Czechoslovakia.
	<i>or</i>
	Collection of Microbial Cultures, Faculty of Pharmacy and Biochemistry, Junin 954-IV Piso, Buenos Aires, Argentina, S.A. <i>Also see</i> MDB <i>and</i> PU.
CCMDB	Culture Collection, Microbiology Department, Faculty of Science, J. E. Purkyně University, tříd Obránců Miru 10, Brno, Czechoslovakia.
CCMTC	Center of Collection of Microbial Types of Czechoslovakia, Department of Parasitology, Charles IV University, Prague, Czechoslovakia.
CCPY	Laboratory for Mycological Research, Faculty of Medicine, Comenius University, Mickiewiczova 13, Bratislava, Czechoslovakia.
CCRUAR	Department of Soil Science, Agricultural College, Alexandria University, Chatby, Alexandria, United Arab Republic.

CCTCC	Committee of Chinese Type Culture Collections, Shanghai, China.
CCTM	Centre de Collections de Types Microbiens, 19 Avenue César-Roux, Lausanne, Switzerland.
	<i>or</i>
CCUPB	Center of Microbial Types, Lille, France. Culture Collection, Utrecht Pays-Bas, Netherlands.
CCY	Institute of Chemistry of the Czechoslovak Academy of Sciences, Dúbravská cesta, Bratislava, Czechoslovakia. <i>A/so</i> CHISAV.
	<i>or</i>
	Czechoslovak Collection of yeasts. Institute of Chemistry of the Slovak Academy of Sciences, Dúbravská cesta, Bratislava, Czechoslovakia.
CDA	See CDAO.
CDAO	Canadian Department of Agriculture, Ottawa, Ontario, Canada. <i>A/so</i> CDA.
CDC	Centers for Disease Control <i>or</i> Communicable Disease Center, United States Public Health Service, 1600 Clifton Rd. N.E., Atlanta, Ga. 30333 U.S.A. <i>A/so</i> NCDC <i>or</i> CDC-RH.
CDC-RH	See CDC.
CEB	Centre d'Etudes du Bouchet, Le Bouchet, France.
CECT	Spanish Collection of Type Cultures, Department of Microbiology, Faculty of Science, Salamanca, Spain. <i>A/so</i> CSIC.
CEFAV	Center of Enterobacteria, Agronomic and Veterinary Faculty, University of Buenos Aires, Buenos Aires, Argentina, S.A.
CEFC	Central Experimental Farm, Ottawa, Ontario, Canada.
CEMA	Experimental Farm of Mandioca, Azvedo, Brazil, S.A.
CFMR	Center for Forest Mycology Research, Forest Products Laboratory, Forest Service, USDA, P.O. Box 5130, North Walnut Street, Madison, Wis. 53705 U.S.A.
CHARLES	Microbiological Institute of Charles University, Prague, Czechoslovakia.
CHISAV	See CCY.
CHPHI	Chemical Pharmaceutical Research Institute, Sofia, Bulgaria.

Christen	H.R. Christen Collection, Winterthur, Switzerland.
CI	Carnegie Institute, Cold Spring Harbor, Long Island, N.Y. 11101 U.S.A. Also CIW.
CIAM(L)	All-Union Scientific Research Institute of Agricultural Microbiology, Gerzen Street, 42, Leningrad, U.S.S.R.
CIB	Centrul Experimental de Ingrȳzȳmintȳ Bacteriene, Bucharest, Romania.
CIH	Central Institute of Hygiene, Ankara, Turkey.
CIMI	Center of Industrial Microbiological Investigations, National Institute of Industrial Technology, Buenos Aires, Argentina, S.A.
CIOMS	Council for International Organizations of Medical Sciences.
CIOS	International Council for Scientific Organization.
CIP	Collection of Microorganisms of the Pasteur Institute, Paris, France.
CIS	Chiba Serum Institute, Chiba, Japan.
CIUS	International Council of Scientific Unions.
CIW	See CI.
CJDA	Technical Research and Development Center of Japan Defense Agency, Setagaya-ku, Tokyo, Japan.
CL	Carlsberg Laboratory, Copenhagen, Denmark.
CLMR	Central Laboratory, South Manchuria Railway Company, Ltd., Darien, Manchuria. (No longer in existence.)
CLV	Central Vaud Dairy, Lausanne, Switzerland.
CM	Carnegie Institute, Pittsburgh, Pa. 15213 U.S.A.
CMAIRA	Collection of Agricultural Microorganisms, Institute of Agricultural Research, Ministry of Agriculture, Prague, Czechoslovakia.
CMBA	Mycology Center, Faculty of Medical Science, Buenos Aires, Argentina, S.A.
CMI	Commonwealth Mycological Institute, Ferry Lane, Kew, Surrey, TW9 3AF England. (Formerly Imperial Bureau of Mycology, Imperial Mycological Institute.) See IMI and CMRI.
CMIIM	Collection of Industrial Microorganisms, Institute of Mycology, Prague, Czechoslovakia.
CMRI	Colonial Microbiological Research Institute, Port-of-Spain, Trinidad, B.W.I. See Hankey and CMI.
CMT	Center of Soil Mycology, Torino, Italy.
CN	Burroughs Welcome Research Laboratories. Beckenham, Kent, England.
CNBP	Collection Nationale de Bacteries Phytophathogenes, INRA, Angers, France.

CNCM	Collection Nationale de Cultures de Microorganismes. Institut Pasteur, 28 Rue du Docteur Roux, 75724 Paris, Cedex 15, France. See <i>a/so</i> IP.
CNU	Collection of Newcastle University Department of Microbiology, The Medical School, University of Newcastle, Newcastle-upon-Tyne, NE1 7RU, England.
CODATA COH	Committee on Data for Science and Technology. Research Institute for the Fermentation Industry, Enzymology and Technical Microbiology, Germany.
COMAMI	Collection of Agricultural, Marine and Industrial Microorganisms, Institute of Agricultural and Technical Microbiology, E. de Nicola, Sessari, Italy.
COMSOL	Commercial Solvents Corporation, Terre Haute, Ind. 47808 U.S.A.
CORNELL	Department of Plant Pathology, Cornell University, Ithaca, N.Y. 14850 U.S.A.
COSTED	Committee on Science and Technology in Developing Countries.
CPBG	Commonwealth Bureau of Plant Breeding and Genetics. School of Agriculture, Cambridge, England. See <i>a/so</i> IPBD.
CPHL	Central Public Health Laboratory, London, England.
CPMIPH	Collection of Pathogenic Microorganisms, Institute of Public Hygiene, Prague, Czechoslovakia.
CRB	Formerly Crops Research Division, now Plant and Entomological Sciences, Beltsville Agricultural Research Center, ARS, USDA, Beltsville, Md. 20705 U.S.A.
CRC	Cholera Research Center, 3 Kyd Street, Calcutta 16, India.
CRIFI CRIPP	Central Research Institute of Food Industry. Department of Microbiology, Research Institute of Cereal and Technical Plants, Bulev. Ionolonescu dela Brod No. 8, Bucuresti-Boneosa, Romania. (Now in Czechoslovakia.) <i>or</i> Central Research Institute of Plant Production, Prague-Ruzyně, Czechoslovakia.
CRL	Central Research Laboratory, Kasauli, Pendjab, India.
CS CSC CSIC	Centraalstelle, Netherlands. See COMSOL. See CECT.

CSIR	Council for Scientific & Industrial Research, Pretoria, Union of South Africa.
	<i>or</i>
	Council of Scientific and Industrial Research, Poona, India.
CSIRO	Commonwealth Scientific and Industrial Research Organization, Division of Food Preservation and Transport, Homebush, N.S.W., Australia.
	<i>or</i>
	Division of Soils, Soil Microbiology Culture Collection, Glen Osmond, South Australia.
CSLPA	Commonwealth Serum Laboratory, Parkeville, Victoria, Australia.
CTF	Technical Center of Farmacobiology. Madrid, Spain.
CU	Culture Collection of Algae and Protozoa, Botany School, Cambridge University, Cambridge, England. <i>See also</i> CAMBR and CCAP.
	<i>or</i>
	Cornell University, Ithaca, N.Y. 14850 U.S.A.
	<i>or</i>
	Chiba University, Chiba, Japan.
CUB	Actinomycete Culture Collection, School of Applied Biology, University of Bradford, Bradford, Yorkshire 7, BD7 1DP England. <i>A/so</i> maintains some cultures previously maintained at Antibiotics and Fermentation Division, Boots Pure Drug Company, Ltd., Nottingham, England.
CUP	Department of Plant Pathology, Cornell University, Ithaca, N.Y. 14850 U.S.A.
CVL	Central Veterinary Laboratory, Ministry of Agriculture, Fisheries and Food (New Haw FAO/WHO Brucellosis Center), Weybridge, Surrey, England.
CYCC	Czechoslovakian Yeast Culture Collection.
CZAA	Czechoslovak Academy of Agricultural Sciences, Prague, Czechoslovakia.
CZAS	Czechoslovak Academy of Agricultural Sciences, Prague, Czechoslovakia.
D	A siglum in U.S. Patent 3,930,946 January 6, 1976, possibly referring to "diploid" <i>also</i> Medical Research Council Microbial Systematics Unit Collection, Leicester University, Leicester, LE1, 7RH England.

DABIS	Former Bureau of Plant Industry, Soil and Agricultural Engineering, now Plant and Entomological Sciences, Beltsville Agricultural Research Center, ARS, USDA, Beltsville, Md. 20705 U.S.A.
DACF	Department of Agriculture, Canada.
DAIMB	National Institute of Biology, Department of Agriculture, Argentina, S.A.
DAOM	Mycological Herbarium or National Mycological Herbarium or Ottawa Mycology, Division of Botany and Plant Pathology or Plant Research Institute, Research Branch, Department of Agriculture, Ottawa, Ontario, Canada.
DASA	Department of Agriculture and Stock, Brisbane, Australia.
DB	Division of Bacteriology and Dairy Research, Department of Agriculture, Ottawa, Ontario, Canada.
DBAU	Department of Bacteriology, The American University, Beirut, Lebanon.
DBCEFC	Department of Botany, Central Experimental Farm, Ottawa, Ontario, Canada.
DBCO	Department of Bacteriology, University of Oregon, Corvallis, Oreg. 97330 U.S.A.
DBFU	Department of Bacteriology, Faculty of Medicine, Fouad Ier, University Ksar-el-Aini, Le Caire, Cairo, United Arab Republic.
DBLMC	Department of Botany, R. G. Lar Medical College, Calcutta, India.
DBM	An acronym appearing in U.S. Patent 4,186,252 (January 29, 1980) and possibly referring to Vysoka Skola Chemicko-Technologiccka, Prague, Czechoslovakia.
DBPU	Department of Biological Sciences, Purdue University, Lafayette, Ind. 47902 U.S.A.
DBUN	Department of Bacteriology, University of Nebraska, Lincoln, Nebr. 68501 U.S.A.
DBUNC	Department of Botany, University of North Carolina, Chapel Hill, N.C. 27514 U.S.A.
DBUP	Department of Biology, Medical Faculty, Palacky University, Olomouc 5, Czechoslovakia.
DFP	Division of Forest Products, Melbourne, Australia.
DFSO (ДФСО)	Biologo-pochvennyy Institute S.O., Academy of Sciences, S.S.S.R. (Dal'nevo-octochnyy Filial). 690022, Vladivostok, 22, prospect IM. 100-letiya Vladivostok, 159, U.S.S.R.
DHI	Former Dairen Hygienic Institute.
DIA	Institute of Animal Industry, Brazil, S.A.

DIFCO	Difco Laboratories, Detroit, Mich. 48226 U.S.A.
DINR	Section of Natural Resistance, Division of Plant Immunology, Institute of Phytotechnology M.A.G., Argentina, S.A.
DIPC	Section of Cultivable Pathogenic Fungi, Division of Plant Immunology, Institute of Phytotechnology M.A.G., Argentina, S.A.
DMG	Department of Microbiology, University of Guelph, Guelph, Canada.
DMIA	Department of Microbiology, Institute of Agronomy, Héverle, Belgium.
DMUC	Department of Microbiology, University of Concepción, Casillo 272, Concepción, Chile, S.A.
DMUR	Department of Mycology, University of Recife, Recife, Brazil, S.A.
DPP	Department of Plant Pathology, Institute of Experimental Botany, Czechoslovak Academy of Sciences, Na Karlovce 1, Prague 6, Czechoslovakia.
DRL(M)	Kanpur Culture Collection, Defense Research Laboratory (Materials), P.B. 320, Kanpur, Uttar Pradesh, India.
DS	An acronym of unknown derivation. <i>A/so</i> Rhone-Poulenc. See RP.
DSIR	Department of Scientific and Industrial Research, Auckland, New Zealand. <i>A/so</i> DSIRNZ.
	<i>or</i>
	Department of Scientific and Industrial Research, England.
DSL	Defence Standard Laboratories, Australia.
DSM	German National Depository of Microorganisms-Central Depository, Grisebachstr. 8, Göttingen, 34, Federal Republic of Germany.
DUSM	School of Medicine, Duke University, Durham, N.C. 27701 U.S.A.
EAN	National Agronomic Station, Lisbon, Portugal.
EANSF	National Agronomic Station, Savanac, Portugal.
EAP	Piracicaba School of Agriculture, San Pablo, Brazil, S.A.
ECA	Department of General Microbiology, College of Agriculture, University of Edinburgh, West Mains Rd., Edinburgh 9, Scotland.
ECOSOC	Economic and Social Council of the United Nations.
EEAG	Experiment Station of Arroz, Gravataí, Brazil, S.A.
EECC	Central Experimental School, Castelar, Argentina, S.A.

EEO	Experiment Station, Osorio, Brazil, S.A.
EEPT	Experiment Station of Pomiculture, Toquari, Brazil, S.A.
EESSM	Experiment Station of Silviculture, Santa Maria, Brazil, S.A.
EFA	Station of Agricultural Phytophathology, La Coruma, Spain.
EIAM (EIAM)	The Estonian Research Institute for Agriculture and Soil Improvement, Tallinn, Est. S.S.R.
EL	See Lilly.
ELF	An acronym of unknown derivation in U.S. Patent 3,930,946 (January 6, 1976).
Eli Lilly	Eli Lilly and Company, Indianapolis, Ind. 46206 U.S.A. See also Lilly.
EM	E. Merck A. G., Darmstadt, Federal Republic of Germany.
EMRS	East Malling Research Station, Kent, England.
ENAP	National School of Agriculture, La Molina, Apartado 456, Lima, Peru, S.A.
ENCB	Herbarium of the National Polytechnic Institute, Escuela Nacional de Ciencias Biologicas, I.P.N., Apartado Postal 26-378, Mexico, D.F.
ENIIZM (ЕНИИЗМ)	Estonian Scientific Research Institute of Agriculture and Soil Improvement, g. Saku, Khar'yuskii r-n. Est. S.S.R.
ENSCU	National School of Health, University City, Madrid, Spain.
EPA	Environmental Protection Agency, 401 M Street SW., Washington D.C. 20460 U.S.A.
ERDC	Engineering Research and Development Center, U.S. Army, Fort Belvoir, Va. 22060 U.S.A.
ESA	Vicosa Higher School of Agronomy, Minas Gerais, Brazil, S.A.
ESAH	National Institute of Animal Health, Tokyo, Japan. See NIAH.
ESAP	Luiz de Queiroz Higher School of Agriculture, Piracicaba, San Pablo, Brazil, S.A.
Est. Agr. Nac.	National Agronomic Station, Sacavém, Portugal.
ETAV	Technical School of Agriculture, Viamão, Brazil, S.A.
ETH	Institute for Special Botany, Conferated Technical University, Universitätstr. 2, Zürich 6, 8000, Switzerland. Also ETH-M and ETHZ.
ETH-M	See ETH.
ETHZ	See ETH.
ETU	Faculty of Engineering, Toyko University, Tokyo, Japan.
EVEC	Experiment Station of Viticulture and Enology, Caxias do Sul, Rio Grande de Sur, Brazil, S.A.

EVEV	Villafranca del Penades Station of Viticulture and Enology, Spain.
EVOWG	Confederated Research Institute for Fruit, Wine and Horticulture, Wädenswil, Switzerland.
EVWS	Also EVWS. See EVOWG.
FAHU	Faculty of Agriculture, Hokkaido University, Sapporo, Japan.
FAKU	Faculty of Agriculture, Kyushu University, Fukuoka, Japan.
FAO	Food and Agriculture Organization of the United Nations, Roma, Italy.
FARMIT	Research Laboratories, Farmitalia, Milano, Italy.
FAT	See ACTU and ATU.
FAU	Faculty of Agriculture, Utsunomiya University, Togichi, Japan.
FAUK	Faculty of Agriculture, University of Kyoto, Kyoto, Japan.
FAVBA	Agronomy and Veterinary Faculty, Buenos Aires, Argentina, S.A.
FBRI	Biochemical Research Institute, Kalevenkatu 56 B, Helsinki 18, Finland.
FCTU	Institute of Forest Chemistry, Department of Forest Products, Faculty of Agriculture, Tokyo University, Tokyo, Japan.
FCUTS	Department of Fermentation Chemistry, University of Technical Science, Prague, Czechoslovakia.
FDA	U.S. Food and Drug Administration, 7th and Jefferson Drive SW., Washington, D.C. 20204 U.S.A.
FEFQ	Fermentations and Enology, Faculty of Chemistry, Montevideo, Uruguay, S.A.
FEH	Experiment Station of Forestry of Hokkaido, Sapporo, Japan.
FERM	Fermentation Research Institute, Agency of Industrial Science & Technology, Ministry of International Trade & Industry. 5-2, Inage Higashi 4-chôme, Chiba, 280 Japan (FERM-P is acronym for patent deposition strains). Also FRI, FRIP, and FRAIST.
FES	Government (or National) Forest Experiment Station, M.A.F., 770-4, Shimoméguro, Meguro-ku, Tokyo, Japan.
FGSC	Fungal Genetics Stock Center, Humboldt State College Foundation, Arcata, Calif. 95521 U.S.A.

FH	Farbwerken Hoechst, Atkiengesellschaft, Frankfurt/Main-Hoeschst, Germany. <i>Also</i> FHP.
	<i>or</i>
	Farlow Library and Herbarium of Cryptogamic Botany, Harvard University, Cambridge, Mass. 02138 U.S.A.
FHP	See FH.
FHSP	Faculty of Hygiene, San Pablo, Brazil, S.A.
FI	Farmitalia Research Laboratories, Via Gracchi 35, 20146 Milano, Italy.
FIE	Tree Botany Institute, Eberswalde, East Germany.
FIL (ФИЛ)	Leningrad Pharmaceutical Institute, P-22, ul. Popova 14, Leningrad, U.S.S.R.
FIUG	Tree Botany Institute, University of Göttingen, Göttingen, Federal Republic of Germany.
FLAS	Herbarium, National Fungus Collections, Gainesville, Fla. 32604 U.S.A.
FLRM	Farmitalia Microbiological Research Laboratory, Milano, Italy.
FMJ	Faculty of Medicine, Juntendo University, Tokyo, Japan.
FMP	Faculty of Medicine, Paris, France.
FMSP	Mycology Laboratory, Faculty of Medicine, University of São Paulo, Caixa Postal 2921, São Paulo <i>or</i> San Pablo, Brazil, S.A.
FMT	Faculty of Medicine, University of Tokyo, Tokyo, Japan.
FPhP	Faculty of Pharmacy, Paris, France.
FPRL	Building Research Establishment, Princes Risborough Laboratory, Aylesbury, Buckinghamshire, England. (Formerly Forest Products Research Laboratories, Ministry of Technology.)
FQIA	Faculty of Industrial Chemistry and Agriculture, National University del Litoral, Santa Fé, Argentina, S.A.
FRAIST	Fermentation Research Institute, Agency of Industrial Science and Technology, Tokyo, Japan. <i>See also</i> FERM.
FRI	Food Research Institute, Ministry of Agriculture and Forestry, Tokyo, Japan. <i>See also</i> FERM.
	<i>or</i>
	Research Institute for Refrigeration, Bratislava, Czechoslovakia.
	<i>or</i>
	Forest Research Institute, Dehradun, India.

FRIP	Fermentation Research Institute Patent Collection, Fermentation Research Institute. Ministry of International Trade and Industry, Inagehigashi, Chiba, Japan. <i>See also</i> FERM.
FRL	Food Research Laboratory, Division of Food Research, CSIRO, Sidney, Australia. <i>A/so</i> FRR.
FRR	<i>See</i> FRL.
FSK	Research Institute for Food Science, Kyoto University, Kyoto, Japan.
FSP	Faculty of Science, Paris, France.
FST	Faculty of Science, University of Tokyo, Tokyo, Japan. <i>See also</i> FS&T.
FS&T	Department of Food Science and Technology, University of California, Davis, Calif. 95616 U.S.A. <i>See also</i> UD and FST.
FUJI	Tokyo Laboratory, Fujisawa Pharmaceutical Industry, Ltd., 957-3, Nukui-Kita-machi, Koganei-city, Tokyo, Japan or 1-6, Kajimacho, 2-chôme, Yodogawa-ku, Osaka, 532, Japan.
FYU	Department of Fermentation Industries, Yamanashi University, 3-11, Takeda 4-chôme, Motoganagi-cho, Kofu-shi, Yamanashi-ken, 400 Japan.
GB	Chair of Microbiology, Faculty of Agronomic Sciences, Gembloux, Belgium.
GBE	Gumma Brewing Experiment Station, Maebashi, Japan.
GCMH	Mycological Herbarium of Ghana.
GCRI	Glasshouse Crops Research Institute, Littlehampton, Sussex, England. <i>or</i> Microbiology Department, Worthing Road, Rustington, Wittehampton, Sussex BN 16 3PU, England. <i>or</i> Virology Department and Virus Reference Collection, Worthing Road, Rustington, Wittehampton, Sussex BN 16 3PU, England.
Genf	Chodat Collection, Genf, Switzerland.
GESH	Government Experiment Station of Hygiene, Tokyo, Japan.
GI	Gades Institute, University of Bergen, Bergen, Norway.
GIB	Research Institute of Brewing, Tax Administration Agency, Takinogawa 2-6, Kita-ku, Tokyo 114, Japan. <i>May be</i> BSRI <i>or</i> RIB.

GIDUV (ГИДУВ)	National Institute for Improvement of Medicine, 19000, ul. Saltykova-Shchedrina, 41, Lenin- grad, U.S.S.R.
GISK or GIKI (ГИСК) or (ГИКИ)	National Institute for Standardization and Con- trol of Medical Biological Preparations in the name of L. A. Taraseviya, Ministry of Public Health S.S.S.R., 121002, G-2, ul. Sivtsev Vrazhek, 41, Moscow, U.S.S.R. <i>A/so</i> GKI.
GKI (ГКИ)	<i>See</i> GISK.
GLAXO	Glaxo Research Ltd., Sefton Park, Stoke Poges, Buckinghamshire, England. <i>See also</i> GLMI.
GLH	G. L. Hennebert collection, Institute of Agrono- my, Heverlee, Belgium.
GLMI	Glaxo Laboratories, Ltd., Greenford, Middlesex, England. <i>See also</i> GLAXO.
GM	Designation for cell cultures from Human Gen- etic Mutant Cell Repository, Institute for Medi- cal Research, Copewood and Davis Streets, Camden, N.J. 08103 U.S.A.
GMB	Institute for General Microbiology, University of Bergen, Bergen Norway.
GRIF	Government Research Institute of Formosa. (Now defunct.)
GRO	Institute for Systematic Botany, Groningen, Netherlands.
GU	Applied Mycological Laboratory, College of Ag- riculture, Gifu University, Gifu, Japan.
GWU	George Washington University, Washington, D.C. 20037 U.S.A.
H	Botanical Museum, Helsinki, Finland.
HAC	Hyogo University of Agriculture, Sasayama, Japan. <i>See also</i> HACC.
HACC	Research Laboratories, Hindustan Antibiotics, Ltd., Pimpri Poona, Maharashtra, 18, India. <i>See also</i> ARCH, <i>also as</i> HAC.
Hankey	Hankey Culture Collection, Colonial Microbiolo- gical Research Institute, Port-of-Spain, Trini- dad, B.W.I. <i>A/so</i> Hankey HCC <i>and</i> HCC. (The Hankey Collection is no longer in exis- tence.)
Hankey HCC	<i>See</i> Hankey.
HBL	The Hartley Botanical Laboratory, University of Liverpool, P.O. Box 147, Liverpool, L69 3BX England.
HCB	Herbarium of the Congo.
HCC	<i>See</i> Hankey.

HCIO	Herbarium Cryptogamie Indiae Orientalis, Division of Mycology and Plant Pathology, Indian Agricultural Research Institute, New Delhi, India.
HFES	Hiroshima Fermentation Experiment Station, Hiroshima, Japan.
HI	Haffkine Institute, Bombay, India.
HIM	Hygiene Institute and Medicinal Research Service, University of Marburg, Marburg, Germany.
HIPH	Hungarian Institute for Public Health.
HIR	Food and Fermentation Division, Hokkaido Prefectural Industrial Research Institute, Sapporo, Japan.
HISZ	Hygiene Institute, Salmonella Central, Hamburg 36, Federal Republic of Germany.
HLX	Atlantic Regional Laboratory, National Research Council of Canada, Halifax, Nova Scotia, Canada.
HMS	Hopkins Marine Station of Stanford University, Pacific Grove, Calif. 93950 U.S.A. Also HMSSU.
HMSSU	See HMS.
Hoechst	See FH.
Hoffmann	Hoffmann La Roche Inc., Nutley, N.J. 07110 U.S.A.
HPB	Food Directorate, Health Protection Branch, Health and Welfare Canada, Ottawa, Canada K1A 0L2.
HRIRMH	Walter and Eliza Hall Research Institute, Royal Melbourne Hospital, Melbourne, Australia.
HSLP	Saint Louis Hospital, Paris, France.
HUT	Department of Fermentation Technology, Faculty of Engineering, Hiroshima University, 2-8, Sendacho, 3-chôme, Senda-Machi, Hiroshima City, 730, Japan.
IAB	ICSU Abstracting Board.
IABH	Bello Horizonte Agronomic Institute, Minas Gerais, Brazil, S.A.
IAC	Campinas Agronomic Institute, San Pablo, Brazil, S.A.
IACOMS	International Advisory Committee on Marine Sciences.
IAE (IAE)	Institute of Atomic Energy in the name of I.V. Kurchatova, 123098, D-98, Pl. Kurchatova, Moscow, U.S.S.R.
IAL	Adolfo Lutz Institute, São Paulo, Brazil, S.A.
IA Louvain	Agronomy Institute, Louvain, Belgium.

IAM	Institute of Applied Microbiology, University of Tokyo, Mukogaoka 1-1-1 or 1-chôme Yayoi-cho, Bunkyo-ku, Tokyo, Japan.
IAMB	International Association of Microbiologists (superseded by IAMS).
IAMS	International Association of Microbiological Societies.
IAMUT	Faculty of Agriculture, Hokkaido University, Sapporo, Japan.
IARI	Indian Agricultural Research Institute, New Delhi, India.
IAUM	Institute of Agriculture, University of Minnesota, Minneapolis, Minn. 55455 U.S.A.
IAUR	Institute of Antibiotics, University of Recife, Recife, Pernambuco, Brazil, S.A.
IAW	Institute of Antibiotics, ul. Staroscinska 5, Warsaw 12, Poland.
IB	São Paulo Biological Institute, São Paulo, Brazil, S.A.
	<i>or</i>
	San Pablo Biological Institute, San Pablo, Brazil, S.A.
	<i>or</i>
	Institute of Biophysics, Czechoslovak Academy of Sciences, Královopolska 135, Czechoslovakia.
IBA	Asunción Bacteriological Institute, Asunción, Paraguay, S.A.
IBB	Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Poland.
IBCAS	Institute of Biology, Czechoslovak Academy of Sciences, Prague, Czechoslovakia.
IBF (ИБФ)	Institute of Biophysics, Academy of Sciences, S.S.S.R., 142292, Moscow Oblast, Serpukhovskoi District, G. Pushchino-na-Oke, U.S.S.R.
IBFI (ИБФИ)	Institute of Biophysics, U.S.S.R., Academy of Sciences, V-133, ul. Profsoyuznaya 7, Moscow, U.S.S.R.
IBFM (ИБФМ)	Institute of Biochemistry and Physiology of Microorganisms, Academy of Sciences, 142292, Moscow Oblast, Serpukhovskoi District, G. Pushchino-na-Oke, U.S.S.R.
IBG	Institute of Soil Fertility, Oosterweg 41, Haren, Groningen, Netherlands.
	<i>or</i>
	Botanical Institute, Geneva, Switzerland.

IBGH	Institute for Botany, Fermentation Physiology and Yeast Pure Culture of the Teaching and Investigations Establishment for Wine, Fruit, and Horticulture, Geisenheim am Rhein, Germany.
IBKH (ИБХ)	Institute of Biorganic Chemistry in the name of M. M. Shemyakina. 117312, ul. Vavilova, 32, V-312, Moscow, U.S.S.R.
IBL	Botanical Institute, Lisbon Faculty of Sciences, Lisbon, Portugal.
IB Lyon	Institute of Bacteriology, Lyon, France.
IBM	Laboratory of Mycology, Malbrán Bacteriological Institute, Vélez Sarsfield 563, Buenos Aires, Argentina, S.A. (Now known as National Institute of Microbiology.)
IBP	International Biological Program.
IBSC	Institute of Bacteriology, Santiago, Chile, S.A.
IBSIC	Institute of Biology and Serotherapy. Cajal Institute, Madrid, Spain.
IBSS	Institute of Bacteriology, Stockholm, Sweden.
IBUB	Botanical Institute, University of Basle, Basle, Switzerland.
IBSP	Butantan Institute, San Pablo, Brazil, S.A.
IBVV (ИБВВ)	Institute of Biology of Inland Seas. 152742, P/O. Borok, Nekoyaskii District, Yaroslavskoi Oblast, Borok, U.S.S.R.
IC	Institute "Dr. Cantacusino," Bucharest, Romania.
ICA	Laboratory of Microbiology, Section of Viticulture, Institute of Cercetari Agronomy, Bucharest, Romania.
ICAR	Institute of Cercetari Agronomy, Bucharest, Romania.
ICCC-1	First International Conference on Culture Collections, held in Tokyo, Japan, October 7-11, 1968.
ICCCII	Second International Conference on Culture Collections, held in São Paulo, Brazil, S.A., July 15-20, 1973.
ICI	Butterwick Research Laboratories, Imperial Chemical Industries, Ltd., Welwyn, Herts, England.
ICIA	International Center of Information on Antibiotics, 32 Blvd. de la Constitution, Liège, Belgium.

ICI Nobel Div.	Imperial Chemical Industries, Ltd., P.O. Box 25, Alderley Park, Macclesfield, Cheshire, England.
ICPB	International Collection of Phytophathogenic Bacteria, Davis, Calif. 95616 U.S.A.
ICQ	Institute of Clinical Surgery, Clinical Hospital, Buenos Aires, Argentina, S.A.
ICRO	International Cell Research Organization.
ICST	Imperial College of Science & Technology, London England.
ICSU	International Council of Scientific Unions.
IDPL	Indian Drugs and Pharmaceuticals, Ltd., Virbhadra (Rishikesh) U.P., New Delhi, India.
IEB	Institute of Epidemiology and Bacteriology, Prague, Czechoslovakia.
IEBR	Institute of Clinical Surgery, Spain. <i>or</i> Spanish Institute of Radicicola Bacteriology, Barcelona, Spain.
IED	Exequiel Dias Institute, Bello Horizonte, Minas Gerais, Brazil, S.A.
IEH	Hokkaido Industrial Experiment Station, Sapporo, Japan.
IEIF	Instituto Experimental de Investigaciones y Fomento Agrícola Ganadero, Santa Fé, Argentina, S.A.
IEM	Institute of Epidemiology and Microbiology, Srobarava 48, Prague 10, Czechoslovakia. <i>Also IEMP, IEMUEM, and UEM.</i>
(IEM)	<i>or</i> Institute of Epidemiology and Microbiology named after Gamaley, Academy of Sciences, Moscow D-128, U.S.S.R.
IEMP	See IEM.
IEMUEM	See IEM.
IF	Institute of Physics in the name of L. V. Kirenskogo SO, Academy of Sciences S.S.S.R., 660036, Adademgorodok, Krasnoyarsk 36, U.S.S.R. See <i>also</i> IFO.
(ИФ)	
IFCC	International Federation of Culture Collections (a subsidiary of IAMS but no longer in existence).
IFEU	Estanzuela Phytotechnical Institute, Colonia, Uruguay, S.A.
IFG	Institute for the Fermentation Industry, 1000 Berlin 65, Seestrassse 13, Federal Republic of Germany.

IFM	Research Institute for Chemobiodynamics, Chiba University, 9-1, Izumicho 3-chôme, Narashino, 275 Japan. (Formerly Institute for Food Microbiology, Chiba University.) 113-4 Okubo, Narashino-city, Chiba or 3-9-1 Izumicho 3-chôme, Narashino-shi, Chiba-ken 275, Japan.
	<i>or</i>
	Institute for Microbiology, Humboldt University, Berlin, East Germany.
IFO	Institute for Fermentation, 54-4, Nishino-machi, Juso, Higashiyodogawa-kr or 4-54 Nishinocho, Juso, Higashiyodogawa-ku or Juso Nishino-machi, Higashiyodogawa-ku or 17-85 Jusohonmachi, 2-chôme, Yodogawa-ku, Osaka, 532 Japan. Also as IF.
IFP	Institut Francaise du Petrole, des Carburants et Lubricants, Rueil-Malmaison, France.
IGC	Center of Biology, Gulbenkian Institute of Science, Oeiras, Portugal.
IGOF	Allied Biological Establishment for Soil and Forest Husbandry, Institute for Cereal, Oil Plants and Forage Plant Diseases, 2305 Keil-Kitseberg, Germany.
IGU (ИГУ)	Irkutsk State University, 664000, ul. Sykhe-Batora, 5, Irkutsk, U.S.S.R.
IH	Institute of Hygiene, Warsaw, Poland.
IH Basle	Institute of Hygiene, Basle, Switzerland.
IH Berne	Institute of Hygiene, Berne, Switzerland.
IH Budapest	Institute of Hygiene, Budapest, Hungary.
IHE	Institute for Hygiene and Epidemiology, Srobarova 48, Prague 19, Czechoslovakia. Also as IEM.
IHFM	Institute of Hygiene, Frankfort am Main, Germany.
IHL	Institute of Hygiene, Lausanne, Switzerland.
IHM	Laboratory of Mycology, Faculty of Medicine, Montevideo Institute of Experimental Hygiene, Avda. A. Ricaldoni 3051, Montevideo, Uruguay, S.A.
IH Milano	Institute of Hygiene, Milano, Italy.
IHMU	Institute of Hygiene, Montevideo, Uruguay, S.A.
IH Perugia	Institute of Hygiene, Perugia, Italy.
IH Pisa	Institute of Hygiene, Pisa, Italy.
IHR	Institute of Hygiene, Rome, Italy.
IHS	Institute of Hygiene, Strasbourg, France.
IHUP	Institute of Hygiene, University of the Philippines, Manila, Philippines.

IHUT	Institute of Hygiene of the University, Istanbul, Turkey.
	<i>or</i>
	Institute of Hygiene, University of Vienna, Vienna, Austria.
IID	Institute for Infectious Diseases, University of Tokyo, 1-39 or 1-chôme Shiba-Shirokanedaimachi, Minato-ku <i>or</i> 4-chôme, 6 Shiroganedia, Minato-ku, Tokyo, 108 Japan. (Formerly The Institute of Medical Science, University of Tokyo.)
IIEM	Indian Institute for Experimental Medicine, Calcutta, India.
IJET	Institute of Immunology and Experimental Therapy, Polish Academy of Sciences, ul. Czerska 12, Wroclaw 53-114, Poland.
IISR	Indian Institute of Sugar Research, Kanpur, India.
IJMARI	Indian Jute Mills Association Research Institute, Calcutta, India.
ILL	Department of Plant Pathology, University of Illinois, Urbana, Ill. 61801 U.S.A.
IM	Inoculation Manufactory, Strančice, Czechoslovakia.
	<i>or</i>
	Microtheque, Mérieux Institute, France.
	<i>or</i>
	Matchnikov Research Institute for Vaccines and Sera, Moscow K-64, U.S.S.R.
IMA	Chair of Bacteriology, Agronomic and Veterinary Faculty, Institute of Agricultural Microbiology, M.A.G., Frederico Laxrose 2154, Buenos Aires, Argentina, S.A. <i>or</i> Institute of Microbiology and Agropecuarios Industry, I.N.T.A., Castelar, B.A., Argentina, S.A. See IAMB. <i>Also</i> IMIA.
IMAB	See IMA.
IMAN (IMAH)	Institute of Microbiology, U.S.S.R. Academy of Sciences, Moscow, U.S.S.R. (Rare, usually INMI.)
IMAP	Instituto Microbiologia Agraria, Pisa, University of Pisa, Pisa, Italy.
IMAS A. S. IMASP	See IMASP. Museum of Cultures. Institute of Microbiology <i>or</i> Mycology. Academy of Sciences, People's Republic of China. Beijing, China. <i>Also</i> as IMAS A. S. <i>or</i> IMAS(P).
IMAS(P)	See IMASP.
IMAT	Institute of Agricultural and Technical Microbiology, Perugia, Italy.

IMATUN	Institute of Agricultural and Technical Microbiology, University of Naples, Naples, Italy.
IMB	Institute of Mycology, Biological Institute for Soil (Agriculture) and Forestry, 1000 Berlin-Dahlem, Federal Republic of Germany. <i>or</i> Institute of Microbiology and Biochemistry, Maria Curie Shlowdowska University, Lublin, Poland. <i>or</i>
(ИМБ)	Institute of Molecular Biology, Academy of Sciences, S.S.S.R., 117312, ul. Vavilova, 32, Moscow, B-312, U.S.S.R.
IMC	IMC Culture Collection, Growth of Sciences Center, International Minerals and Chemical Corporation, Libertyville, Ill. 60048 U.S.A. <i>or</i> Institute of Microbial Chemistry, 3-14-23 Kamiosaki, Shinagawa-ku, Tokyo, 141 Japan.
IMCAS	Institute of Microbiology, Czechoslovak Academy of Sciences, Na cvičišti 2, Prague, Czechoslovakia.
IMET	Institute for Microbiology and Experimental Therapy, Beuthenbergstrasse 11, Jena 69, East Germany.
IMG	Institute for Microbiology, University of Göttingen, Göttingen, Federal Republic of Germany.
IMH	Institute of Microbiology and Hygiene, University of Liège, Liège, Belgium.
IMI	Imperial Mycological Institute, Kew, England. See CMI. <i>A/so</i> IMI CMI.
IMIA	See IMA.
IMIB	Department of Bacteriology, Commonwealth Mycological Institute, Ferry Lane, Kew, Surrey, England. See CMI <i>and</i> IMI.
IMI CMI	See IMI.
IMIV	Institute of Microbiology and Virusology, Kazakh Academy of Sciences, 480100 ul. Kirova 103, Alma-Ata. 100 Kaz. S.S.R. <i>A/so</i> IMIV.
(ИМИВ) <i>or</i> (ИМИВ)	
IMJ	Institut for Microbiology and Experimental Therapy, Jena, East Germany.
IMK	Institute for Milk Hygiene, Kiel, Federal Republic of Germany.
IMM	Institute of Marine Medicine, Gdansk, Poland.
IMME	Institute for Medical Microbiology and Epidemiology, University of Halle, East Germany.

IMP	Institute of Microbiology, University Medical School, Pecs, Hungary.
	<i>or</i>
(ИМП)	Institute of Medical Parasitology and Tropical Medicine, 119435, M. Pirogovskaya ul., 20, Moscow, G-435, U.S.S.R.
IMPE	Cantacuzino Institute of Microbiology, Parasitology and Epidemiology, Spaiul Independen-tei 103, Bucharest 35, Romania.
IMRM	Institute of Medical Research, Malaya.
IMRU	Waksman Institute of Microbiology, Rutgers-The State University, New Brunswick, N.J. 08854 U.S.A.
IMS	Institute of Microbiology, Sofia, Bulgaria.
IMT	Institute of Tropical Medicine, Basle, Switzer-land.
IMTPL	Prince Leopold Institute of Tropical Medicine, Anvers, Belgium.
IMUFPe	Institute of Mycology, Recife, Pernambuco, Brazil. <i>Also as URM.</i>
IMUNT	Institute of Microbiology, University of Tucumán, Tucumán, Argentina, S.A. <i>Also IMUT.</i>
IMUR	Institute of Mycology, University of Recife, Recife, Brazil, S.A.
IMUT	See IMUNT.
IMV	Institute of Microbiology and Virology. Acade-my of Sciences of the Ukrainian SSR.
(ИМВ)	
IMVS	Institute of Medical and Veterinary Science, Adelaide, Australia.
IMZH	Institute of Animal Morphology, ul. Vavilova, 12, Moscow, U.S.S.R.
(ИМЖ)	<i>or</i>
	District Nazyvalsya Institute of Living Mor-phology.
IN	Research Institute, Ihara Noyaku Company, Ltd., 1000 Shibukawa, Shimizu-Shi, Shizuoka-ken, Japan (now defunct).
INA	Institute for Research on New Antibiotics, Academy of Medical Sciences, 119021 Bol-shaia Pirogovskaia 11, ul., 20, Moscow, G-21, U.S.S.R. <i>Also IRNA.</i>
(ИНА)	
INBVV	Institute of Biology of Inland Waters, Borok, Nikouzhskii District, Yaroshalskoi Region, U.S.S.R.
(ИНБВВ)	
INBYUM	Institute of Biology of the Southern Seas, Acad-emy of Sciences, Ukranian S.S.R., 335000, Pr. Nakhimova, 2, Sevastopol, Ukr. S.S.R.
(ИНБЮМ)	

INMI (ИНМИ)	Institute of Microbiology, Academy of Sciences, 117312 Profsojuzanaja ul. 7, Kor. 2, Moscow B-133 V-312, U.S.S.R. See IMAN, VKM and VKMW.
INMIA	See INMIArm.
INMIArm. (ИНМИАрм)	Institute of Microbiology, Academy of Sciences, Armenian S.S.R., ul. Charentsa, 19, Erevan, Arm. S.S.R.
INPI	National Institute of Industrial Property, Paris, France.
INRA	National Institute of Agronomic Research, Paris, France.
INTA	Institute of Plant Pathology, National Institute of Microbiology, Castelar, Argentina, S.A. or National Institute of Agropecuria Technology, Buenos Aires, Argentina, S.A.
IOC	Laboratory of Mycology, Oswaldo Cruz Insti- tute, Caixa Postal 926, Rio-Est, Guanabara, Rio de Janeiro, Brazil, S.A.
IP	Pasteur Institute, Rue Docteur Roux, 25, Paris 15, France. Also IPPF and IPP. or Department of Insect Pathology, Institute of Entomology, Czechoslovak Academy Ved., Prague, Czechoslovakia.
IPA (ИПА)	Institute of Soil Management and Agrochemis- try, Academy of Sciences Azerbaijan S.S.R., 370122, ul. 6-ya Khrebtovaya, 5, Baku, 122 Az. S.S.R. or Institute for Phytopathology, Aschersleben, Germany.
IPAlger	Pasteur Institute, Alger, Algeria.
IPB	Pasteur Institute, Brussels, Belgium. or Research Institute for Pharmacy and Biochem- istry, Kourimska 17, Prague, Czechoslovakia.
IPBD	Commonwealth Bureau of Plant Breeding and Genetics, School of Agriculture, Cambridge, England. See CPBG.
IPCR	Institute for Physical and Chemical Research, 31, Komagome-Kamifujimae-cho, Bunkyo-ku or 2-28-8 Honkomagome, Bunkyo-ku, Tokyo, Japan or 2-1, Hirosawa, Wako-shi, Saitama- ken, 351 Japan.
IP&CR	See IPCR.
IPD	Pasteur Institute, Dakar, French East Africa.
IPF	Instytut przemyslu fermentacyjnego, Warsaw, Poland.

IPFM	Institute of Parasitology, Faculty of Medicine, Paris, France.
IPH	National Institute of Public Health, Tokyo, Japan.
IPL	Pasteur Institute, Lyon 69, France.
IPLille	Pasteur Institute, Lille, France.
IP Lisbon	Pasteur Institute, Lisbon, Portugal.
IPM	Pasteur Institute, Casablanca, Morocco.
IPO	Institut voor Plantenziektenkundig Onderzoek, Wageningen, Netherlands.
IPP	See IP.
IPPF	See IP.
IPPP	Institute for Plant Physiology, University of Prague, Prague, Czechoslovakia.
IPPretoria	Institute of Pathology, Pretoria, Union of South Africa.
IPR	Institute of Parasitology of the University, Rome Italy.
IPT	Pasteur Institute, Túnez, Africa.
IPV	Institute of Plant Pathology, University of Milano, Via Celoria 2, 20133, Milano, Italy. <i>Also</i> IPV(M) <i>and</i> IPVM.
IPVM	See IPV.
IPV(M)	See IPV.
IPV(Pisa)	Institute of Plant Pathology, Pisa, Italy.
IPZ	Institute of Soil Science, Teodora Drajzera 7, Beograd, Yugoslavia.
IRCE	Ramon y Cajal Institute, Madrid, Spain.
IRK	Robert Koch Institute, Berlin, Germany.
IRNA	See INA.
ISC	International Salmonella Center, Statens Seruminstitut, Artillerivej 5, 2300 Copenhagen, Denmark.
	<i>or</i>
	Iowa State College, Ames, Iowa 50010 U.S.A. <i>Also</i> ISU.
ISCD	Institute for State Control of Drugs Bul. VI Zaimov 26, Sofia, Bulgaria.
ISSET	Institute of Health and Tropical Diseases, México, D.F., México.
ISL	International Subcommittee on Lactobacilli and Closely Related Organisms.
ISM	Shionogi Research Laboratory, Shionogi and Company, Ltd., Fukushima-ku, Osaka, Japan.
ISN	Institute of Natural Sciences, Ciudad Universitaria, Bogota, Columbia, S.A.
ISP	International <i>Streptomyces</i> Project, Ohio Wesleyan University, Delaware, Ohio 43015 U.S.A. (Now defunct.)

ISR	Istituto Superiore di Sanite, Roma, Italy. <i>A/so</i> ISSR.
ISRA	Institute of Soil Research & Agrochemistry, Hungarian Academy of Science, Herman Ot- to út 15, Budapest 11, Hungary.
ISSR	See ISR.
ISTD	Danish Institute of Sero-therapy, Copenhagen, Denmark.
ISTI	Indian Sugar Technological Institute, Kanpur, India.
ISTTU	Institute of Science & Technology, University of Tokyo, Tokyo, Japan.
ISU	Department of Agronomy, Iowa State University, Ames, Iowa 50010 U.S.A.
ISV	Institute of Plant Health, M.A.G., Argentina, S.A.
	<i>or</i>
	Torlak Institute of Serums and Vaccines, Bel- grade, Yugoslavia.
ISVI	State Institute of Serums and Vaccines, Hes- sarak-Karadj, Iran.
ISVV (ICBB)	Scientific Research Institute of Horticulture, Grape Growing and Winemaking, Kishinew, U.S.S.R.
ITBA	Institute of Technology, Buenos Aires, Argen- tina, S.A.
ITC	Department of Biology, Massachusetts Institute of Technology, Cambridge, Mass. 02139 U.S.A. See BDC.
ITCC	Indian Type Culture Collection, Division of My- cology and Plant Pathology, Indian Agricul- tural Research Institute, New Delhi 12, India.
ITCCF	Indian Type Culture Collection of Fungi, Indian Agricultural Research Institute, New Delhi 12, India.
ITH	Institute of Tropical Hygiene, Amsterdam, Neth- erlands.
ITK	Institute of Tuberculosis, Kyoto University, Mukaharmachi, Shogoin, Sakyo-ku, Kyoto, Japan.
ITR	Oscar Kallner Institute for Animal Nutrition, Rostock, East Germany.
IU	The Culture Collection of Algae, Indiana Univer- sity, Bloomington, Ind. 47401 U.S.A.
IUB	International Union of Biochemistry.
IUBS	International Union of Biological Sciences.
IUNG	Instytut Uprawy, Nawozenia i Gleboznowsta, Pulawy, Poland.

IUNS	International Union of Nutritional Sciences.
IUPAB	International Union of Pure and Applied Biophysics.
IUPAC	International Union of Pure and Applied Chemistry.
IVBP	Veterinary Institute of Bacteriology and Parasitology, University of Berne, Berne, Switzerland.
IVL	Veterinary Institute, Lausanne, Switzerland.
IVR	Institute for Virus Research, Kyoto University, Kyoto, Japan.
IZ	Fermentation Institute, University of São Paulo, Caixa Postal 56, Piracicaba, São Paulo or San Pablo, Brazil, S.A. or Imunolski Zavod, Rocfelerova 2, Zagred, Yugoslavia.
IZS	Institute of Experimental Zooprophyllactics, Teramo, Italy.
IZU	Zymotechnolgy Institute, Superior School of Agriculture, University of São Paulo, Brazil.
JARA	Japan Antibiotic Research Association, Tokyo, Japan.
JARI	Jute Agricultural Research Institute, Barackpore, Cuttack, India.
JCC	Biology Department, Agricultural Institute, Johnstown Castle, Wexford, Ireland.
JDA	2nd Research Center, Development & Research H.Q., Japan Defense Agency, 9, Lkejiri-cho, Setagayuku, Tokyo, Japan.
JFCC	The Japanese Federation of Culture Collections of Micro-organisms, Institute for Infectious Diseases, University of Tokyo, Shiba-shiroganedaimachi, Minato-ku or Institute of Applied Microbiology, University of Tokyo, Bunkyo 8-ku, Tokyo, Japan.
JH	Jena/Yeasts.
JHU	Johns Hopkins University, Baltimore, Md. 21205 U.S.A.
JMCH	Japan Monopoly Corporation, Hatano Tobacco Institute, Kanagawa, Japan.
JNAU	Department of Soil Science and Agricultural Chemistry, J.N.A.U., P.B. No. 80, Krishinagar, Jabalpur, India.
JP	Jena/Molds.

K	Herbarium of the Royal Botanical Gardens, Kew, England.
	<i>or</i> Laboratory of Food Science, Kyoto University, Japan.
KAG	Kagawa University, Japan.
Kaken	Kaken Chemical Company, Ltd., 31 Komagome, Kamifujimae-cho, Bunkyo-ku, Tokyo, Japan. <i>See also</i> KCC and KChC.
Kayaku	Kayaku Antibiotics Research Company, 8-2 chôme, Funado-cho, Itabashi-ku, Tokyo, Japan.
KBPMGU (КБПМГЧ)	Department of Biology, Faculty of Biology, M.V. Lomonosova Moscow National University, 117234 Leninsky gory, Moscow, B-234, U.S.S.R.
KCC	Culture Collection of Actinomycetes, Kaken Chemical Company, Ltd., 6-42, Jujodai 1- chôme, Kita-ku, Tokyo 114, Japan. <i>See also</i> Kaken and KChC.
KChC	<i>See</i> KCC.
KE	Canada Department of Agriculture, Kentville, Nova Scotia.
KFRI	Laboratory of Comparative Biology, Karsir Foun- dation Research Institute, Richmond, Calif. 94802 U.S.A.
KGU (КГЧ)	Kishinevsky National University, g. 277000 Kish- inev. ul. Pirogova, 65, U.S.S.R.
KhFz (ХФЗ)	Chemico-Pharmaceutical Factory, Karpov, Mos- cow, U.S.S.R.
KHGU (ХГЧ)	Kharbkovsky National University 310000, ul. Universitetskaya, 16, Kharkov, U.S.S.R.
KHL	Kobe Hygienic Laboratory, Hyogo, Japan.
KHS	Regional Public Health Laboratory Service <i>or</i> Regional Hygienic Stations, Czechoslovakia.
KI	The Kitasato Institute, 9-1, Shirokane, 5-chôme Sanko-cho, Minato-ku, Tokyo, 108 Japan. (Formerly Kitasato Institute for Infectious Di- seases.) <i>See</i> KIID. <i>Also</i> KITA.
KIID	Department of Antibiotics, Kitasato Institute, Shiba, Shirogane, Sanko-cho, Minato-ku, Tokyo, 108 Japan. <i>See</i> KI. <i>Also</i> KITA.
KIMG	Kultursammlung am Institut für Mikrobiolo- gie, Gosslerstr. 16, 34 Göttingen, Federal Re- public of Germany.
KITA	<i>See</i> KIID.
KL	Bacteriological Department of the Karolinska Institute, Stockholm, Sweden.
KM	Kansai Medical School, Moriguchi-city, Osaka, Japan.

KM LGU (KM ЛГЧ)	Chair of Microbiology, Leningrad State University, 190000, Universitetskaya nab., 7/9, Leningrad U.S.S.R.
KMMGU (KMMГЧ)	Department of Microbiology, Faculty of Biology, M.V. Lomonosova, Moscow National University, 117234, Leninskie gory., Moscow, B-234 U.S.S.R.
KNG & SF	Koninklijke Nederlandsche Gist en Spiritusfabriek N.V. or Gist-Brocades N.V., Delft, Netherlands.
KNRMGU (KHPMГЧ)	Department of Lower Plants, Faculty of Biology, M.V. Lomonosova Moscow National University, Leninskie gory., Moscow, U.S.S.R.
KPUM	Medical Microbiological Department, Kyoto Prefectural University, Kyoto, Japan.
Král	The Král Collection, one of the first collections of living microorganisms which operated in modern fashion. (This collection ceased to exist in 1942.)
KSC	Department of Botany, Kansas State College, Manhattan, Kans. 66502 U.S.A.
KSE	Kagawa Shoyu Experimental Station, Tokushima, Japan.
KTH	Royal Technical High School, Stockholm, Sweden.
KU	Faculty of Medicine, Kyushu University, Fukuoka, Japan.
KUB	Department of Biochemistry, Juwait University, P.O. Box 5969, 811:188 Kuwait, Arabia.
KUT	Faculty of Engineering, Kansai University, Osaka, Japan.
KY	Tokyo Research Laboratory, Kyowa Hakko Kogyo Company, Ltd., 6-6, Asahimachi-3-chôme machida shi, Tokyo, 194 Japan.
KYA	Laboratory of Zymotic & Industrial Fermentations, Faculty of Agriculture, Kyushu University, Fukuoka, Japan. Also KYU.
KYM	Faculty of Medicine, Kyushu University, Fukuoka, Japan.
KYU	See KYA.
L	Rijksherbarium, Leiden, Netherlands. or Lepetit S.P.A., Via Roberto Lepetit 8, Milano, Italy.
LAKTOFLORA	Research Laboratories of the Dairies, Association for the Production of Pure Milk Cultures, Laktoflora, Ke dvoru 2, Prague 6, Czechoslovakia.

LAPP	Laboratory for Anatomy and Physiology of Plants, J.E. Purkyně University, Kotlářská 2, Brno, Czechoslovakia.
LBG	Institute for Agricultural Bacteriology and Fermentation Biology, Confederated Technical High School, Universitätsstrasse 2, Zurich, Switzerland.
LBIN	Landbouwproefstation en Bodemkundig Instituut, T.N.O. Groningen, Netherlands.
LBL	V.I. Lenin Laboratory Library, 12109, G-19, ul.,
(ЛБЛ)	Kalininsky pr., 3, Moscow, U.S.S.R.
LBPB	Laboratory of Bacteriology and Parasitology, Faculty of Medicine, University of Bruxelles, Brussels, Belgium.
LC	See LCP.
LCD	Carlsberg Laboratory, Copenhagen, Denmark.
LCF	Central Laboratory of Phytopathology, Buenos Aires, Argentina, S.A.
LCI	Italian Cryptogamic Laboratory, Botanical Institute, University of Pavia, Pavia, Italy. See LCPI.
LCP	Laboratory of Cryptogamy, National Museum of Natural History, 12 Rue de Buffon, Paris (5°), France. Also LC, MP, PC, LC(P), Mycotheque, and MNHN.
LC(P)	See LCP.
LCPI	Cryptogamic Laboratory, Pavia, Italy. See LCI.
LED	Lederle Laboratories Division, American Cyanamid Co., Pearl River, N.Y. 10965 U.S.A. See AMCY.
Lederle	Lederle Laboratories, Division of American Cyanamid Company, Pearl River, N.Y. 10965 U.S.A. Also as LLRA and LED.
LEO	Leo Pharmaceutical Products, Copenhagen, Denmark.
Lep.	See Lepetit.
Lepetit	Research Laboratories, Lepetit S. p. A., Via Roberto Lepetit 8, Milano, Italy. Also as L or Lep.
LFCD	Laboratory of Fermentology, Alfred Jörgenson, Copenhagen, Denmark.
LGU	Department of Microbiology, Leningrad National University, Universitetskaya nab., 7/9,
(ЛГЧ)	19000, Leningrad, U.S.S.R.
LIA	Museum of Cultures, Leningrad Research Institute of Antibiotics, 32 Ogorodnikov Prospect,
(ЛИА)	Leningrad L-20, U.S.S.R.
	or
	Department of Microbiology, Latvian Academy of Agriculture, Jelgava, Latvia, U.S.S.R.

LIAN (ЛИАН)	Leningrad Institute of Antibiotics, 190000, Ogorodnikova dr. 23, Leningrad, U.S.S.R.
LIHMC	Leningrad Institute of High-molecular Compounds, Academy of Sciences, Leningrad, U.S.S.R.
Lilly	Division of Eli Lilly and Company and The Lilly Research Laboratories, Indianapolis, Ind. 46206 U.S.A.
LIO	See LIA, a <i>lapsus calami</i> in Antibiotiki 20(3): 198.
LIP	Laboratory of Insect Pathology, University of California, Berkeley, Calif. 94701 U.S.A.
LKB	Laboratory of Kodama Brewing Company, Itagawamachi, Akita Prefecture, Japan.
LKHFI (ЛХФИ)	Leningrad Chemico-Pharmaceutical Institute, 197022, ul. prof. Popova, 14, Leningrad, P-22, U.S.S.R.
LLRA	See Lederle.
LM	Laboratory for Microbiology, Delft, Netherlands.
LMD	Laboratory for Microbiology, Delft, Netherlands. or Laboratory for Microbiology, The Landbouwhogeschool, Wageningen, Netherlands.
LMMU	School for Microbiology and Molecular Biology, Stuttgart University, Stuttgart/Hohenheim 7000, Federal Republic of Germany.
LMW	Laboratory of Microbiology, University of Wageningen, Wageningen, Netherlands.
LNGI (ЛНГИ)	Institute of Chemistry of Natural Products, Moscow, U.S.S.R.
LOVNIKHPI (ЛОВНИИХП)	Leningrad Branch, Scientific Research Institute of the Baking Industry. 196084, Smolenskaya ul. 18a, Leningrad, U.S.S.R.
LP	Mycothèque, Laboratory of Parasitology, Faculty of Medicine, Paris, France.
LPS	C. Spegazzini Institute of Botany, La Plata, Argentina, S.A. or Societe Anonyma: Les Produits Organiques du Santerre Orsan, Paris, France.
LQA	Laboratoire de Química Agrícola.
LRI	Leather Research Institute, Otrokovice, Czechoslovakia.
LRL	Lilly Research Laboratories, Eli Lilly and Co., Indianapolis, Ind. 46206 U.S.A.
LSH	London School of Hygiene and Tropical Medicine, London, England. Also LSHTM.

LSHB	Biochemistry Department, London School of Hygiene and Tropical Medicine, Keppel Street (Gower Street), London, WC 1, England.
LSHM	Mycological Reference Laboratory, London School of Hygiene and Tropical Medicine, London, England.
LSHTM	See LSH.
LSL (ЛСЛ)	The Lenin State Library, Moscow, U.S.S.R.
LSU	Louisiana State University, Baton Rouge, La. 70803 U.S.A.
LT	Treub Laboratory, Boger, Indonesia.
LUV	Ultra-virus Laboratory, Lyon, France.
M	State Botanical Collection, München, Federal Republic of Germany.
MA	Merck and Company. <i>See also</i> MCC and Merck.
	<i>or</i>
MacC	Medical Academy, Sofia, Bulgaria.
	Department of Microbiology, Macdonald College, Quebec, Canada. <i>See also</i> MCC.
MACN	Argentine Museum of Natural Sciences, "Bernardino Rivadavia," Buenos Aires, Argentina, S.A.
MAFF	Ministry of Agriculture, Fisheries and Food, Princes Risborough Laboratory Building Research Establishment, Princes Risborough, Aylesbury, Buckinghamshire, England.
Magarač	All-Union Scientific-Research Institute of Vini- culture and Viticulture, Magarač. Jalta, Krym, U.S.S.R.
MAR	Grasslands Research Station, P. Bag 701, Mar- ondellas, Rhodesia.
MAUE	Laboratory of Industrial Microbiology, Faculty of Agriculture, Tokyo University of Education, Tokyo, Japan.
MB	Herbarium, Botanical Institute, University of Marburg, 355 Marburg/Lahn, Germany.
	<i>or</i>
MBA	Monopoly Bureau of Japan, Tokyo, Japan..
MBL	Microbiological Associates.
	Medical Biological Laboratory, Rijswijk, ZH, Netherlands.
MCC	Merck Culture Collection, Merck and Co., Rah- way, N.J. 07065 U.S.A. <i>See also</i> MA and Merck.
	<i>or</i>
	MacDonald College Collection, MacDonald Col- lege, Quebec, Canada. <i>See also</i> MacC.

MCI	Culture Collection, Central Research Laboratory, Mitsubishi Chemical Industries Limited, 1000 Kamoshida-machi, Midori-ku, Yokohama 227, Japan.
MCRL	Microbial Chemistry Research Laboratories, Tanabe Seiyaku Company, Limited, 2-50 Kawagishi 2-chôme Toda-shi, Saitama-ken or 3073 Shimatoda, Toda-machi, Kita-adashigun, Saitama-ken 335 Japan or Microbiological Dept., Biology and Chemistry Research Laboratory.
MCU	Faculty of Medicine, Chiba University, Chiba, Japan.
MDB	Microbiology Department, Faculty of Natural Sciences, J. E. Purkyně University, Brno, Czechoslovakia. <i>Also CCM and PU.</i>
MDH	Michigan Department of Health, Lansing, Mich. 48914 U.S.A.
MEIJI	Meiji Milk Products Company, Tokyo, Japan. <i>or</i> Research Laboratories, Meiji Seika Kaisha, Ltd., Morooka-cho, Kohoku-ku, Yokohama, 222 Japan.
MEJ	Ministry of Education, Mombu-sho, Japan.
Merck	Merck Sharp and Dohme Laboratories, Division of Merck and Company Incorporated, Rahway, N.J. 07065 U.S.A. <i>See also MA and MCC.</i>
MFC	Matsushima Fungus Collection, Shionogi Research Laboratory, Shionogi & Company, Limited, Fukushima-ku, Osaka, Japan.
406 MGL	406th Medical General Laboratory, U.S. Army, Zama, Japan.
MGU (MГЧ)	Chair of Study of Lower Plants, Moscow State University, 117234, Leninsky Gory, Moscow B-234, U.S.S.R.
MHC&AD	NYC Memorial Hospital for Cancer and Allied Diseases, 444 E. 68th St., New York, N.Y. 10021 U.S.A.
MICH	University Herbarium, Ann Arbor, Mich. 48109 U.S.A.
Millport	Marine Station, Millport, Scotland.
MIRCEN	Microbiological Resource Centre.
MKU	Faculty of Medicine, Kanagawa University, Ishikawa, Japan.
MLA	Mycological Laboratory, Botany Department, Allahabad University, Allahabad, India.
MLPF	Laboratory of Microbiology, Faculty of Agriculture, Sarajevo, Yugoslavia.

MMRS	Mount Makulu Research Station, Northern Rhodesia.
MNC	Morinaga Confectionery Company Laboratory, Tokyo, Japan.
MNHN	See LCP.
MO	School of Medicine, Osaka University, Osaka, Japan.
MOCU	Department of Biochemistry, Osaka City University, School of Medicine, 2-chôme, Asahimachi, Abeno-ku, Osaka, Japan. <i>Also</i> MOMU.
MOMU	See MOCU.
Montecatini	Antibiotic Research Laboratory of S.A. Montecatini, Milano, Italy.
MP	See LCP.
MR	Mycological Herbarium of the Federation of Rhodesia and Nyasaland. (Nyasaland now is Malawi.)
MRE	Microbiological Research Establishment, Porton, England.
MRI	Microbiology Research Institute, Central Experimental Farm, Ottawa, Ontario, Canada.
MRL	Mycoplasma Reference Laboratory, Bowthorpe Road, Norwich, NR2 3TX England.
MRNY	Medical Research, New York, N.Y. 11101 U.S.A.
MSDH	Michigan State Department of Health.
MSH	Department of Microbiology, Dartmouth Medical School, Hanover, N.H. 03755 U.S.A.
MSNZ	Medical School, Dunedin, New Zealand.
MSU	Department of Microbiology, Michigan State University, East Lansing, Mich. 48823 U.S.A.
	<i>or</i>
(MC4)	The Moscow State University, Moscow, U.S.S.R.
MT	The National Sanatorium Chuba Chest Hospital, Obu, Aichi 474, Japan.
MTHU	Department of Bacteriology, Faculty of Medicine, Tohoku University, 4 Ban-cho, Kita, Sendai City <i>or</i> Kita, Ban-cho, Sendai-shi, Miyagi-ken, 980 Japan.
MTU	Faculty of Medicine, University of Tokyo, 7-chôme, Hongô, Bunkyo-ku, Tokyo, Japan.
MU	Laboratory of Fermentation, Faculty of Agriculture, Mie University, Tsu, Japan.
	<i>or</i>
	Institute of Microbiology, Faculty of Medicine, Brno, Czechoslovakia.

MUCOB	Manchester University Collection of Bacteria, Department of Bacteriology and Virology, University of Manchester, Oxford Road, Manchester, M13 9PT, Greater Manchester, England.
MULg	Department of Microbiology, University of Liège, 32, Boulevard de la Constitution, Liège, Belgium.
MUSEUM	National Museum of Natural History, Paris, France.
MVZ	Veterinary Hygienic Laboratories, Czechoslovakia.
MW	Mycology Division, Institute for Special Botany, Jena, Weimar, East Germany.
Mycotheque	See LCP.
MZ	An acronym of unknown derivation <i>in</i> Godfredsen, W. O., and others, 1970. Tetrahedron 26: 4931-4946.
NA	See ABBOTT.
NADL	National Animal Disease Laboratory, Ames, Iowa 50010 U.S.A.
NAGAS	Nagas Laboratories, 380 MiShuka-Cho, Seta-gayaku, Tokyo, Japan.
NARI	National Agricultural Research Institute, M.A.F., Tokyo, Japan.
NARI(AES)	See NARI.
NBIR	The National Bureau of Industrial Research, Ministry of Economic Affairs, P.O. Box 268, Chungking, China.
NBIRN	The National Bureau of Industrial Research, Nanking, China.
NBL	Naval Biological Laboratory, Oakland, Calif. 91627 U.S.A.
NCA	National Canner's Association, Washington, D.C. 20006 U.S.A.
NCAIA	National Center for Antibiotics and Insulin Analysis, Food and Drug Administration, Washington, D.C. 20204 U.S.A.
NCDC	See CDC.
NCDO	National Collection of Dairy Organisms, Shinfield, Reading, RG2 9AT Berkshire, England. Also National Institute for Research in Dairy-ing, same address.
NCIB	National Collection of Industrial Bacteria. Ministry of Agriculture, Fisheries, and Food, Torry Research Station, P.O. Box 31, 135 Abbey Road, Aberdeen AB9, 8DG, Scotland.

NCIM	National Collection of Industrial Microorganisms, National Chemical Laboratory, Poona 8, Maharashtra, India.
NCL	National Chemical Laboratory, Division of Technical Service, Poona 8, India.
NCMB	National Collection of Marine Bacteria, Ministry of Agriculture, Fisheries, and Food, Torry Research Station, P.O. Box 31, 135 Abbey Road, Aberdeen AB9, 8DG, Scotland.
NCMH	The North Carolina Memorial Hospital, University of North Carolina, Chapel Hill, N.C. 27514 U.S.A.
NCPPB	National Collection of Plant Pathogenic Bacteria, Ministry of Agriculture, Fisheries, and Food, Plant Pathology Laboratory, Hatching Green, Harpenden, Hertsfordshire, England.
NCSC	North Carolina State College, Raleigh, N.C. 27607 U.S.A.
NCTC	National Collection of Type Cultures, Central Public Health Laboratory, Colindale Avenue, London, N.W. 9, 5HT England. (Formerly located at the Lister Institute.)
NCUM	Medical School, Nagoya City University, Nagoya, Japan.
NCYC	National Collection of Yeast Cultures (formerly at Brewing Industry Research Foundation, Nutfield, Redhill, Surrey, England), now at Food Research Institute, Colney Lane, Norwich, Norfolk, NR4, 7UA, England.
NDRC	Former National Defense Research Committee, Washington, D.C. U.S.A.
NDSU	Department of Bacteriology, North Dakota State University, Fargo, N. Dak. 58102 U.S.A.
NEA	Nobel Explosives Company, Ardeer, Scotland.
NGO	Non-Governmental Organizations.
NGR	Department of Agriculture, Stock and Fisheries, Port Moresby, Papua and New Guinea.
NHL	National Hygienic Laboratory or National Institute of Hygienic Sciences, 2-203 Tamagawa Yagamachi, Setagaya-ku, Tokyo, Japan.
NI	Nagao Institute, 96 Kinuta-machi, or 380 Mishuku, Setagaya-ku, or Kitashinagawa, Tokyo, Japan (now defunct).
NIAH	National Institute of Animal Health, Ministry of Agriculture and Forestry, Jôsui-hommachi, Kodaira City, Tokyo, Japan.
NIAID	National Institute of Allergy and Infectious Diseases, Hamilton, Mont. 59840 U.S.A.
NIAQT	National Institute for Agricultural Quality Testing, Keleti Károly u. 24, Budapest II, Hungary.

NIAS	Department of Soils and Fertilizers, National Institute of Agricultural Sciences, Nishigahara, Kita-ku, Tokyo, Japan.
NIG	National Institute of Genetics, Shizuoka, Mishima, Japan.
NIH	National Institutes of Health, Bethesda, Md. 20014 U.S.A. <i>Also</i> NIHA. <i>or</i> National Institutes of Health of Japan, Tokyo, Japan. <i>See also</i> NIHA <i>and</i> NIHJ. <i>or</i> National Institute of Hygiene, 2-6 Budapest, Hungary.
NIHA	<i>See</i> NIH.
NIHJ	National Institute of Health of Japan <i>or</i> Department of Antibiotics, National Institute of Health of Japan, 284, Chojamaru, 10-39, Kamiosaki 2-chôme Shinagawa-ku, Tokyo, 141 Japan. <i>See</i> NIH.
NIHJB	An acronym appearing in U.S. Patent 4,147,778 (April 3, 1979).
NIK	Nagao Institute, Kyoto Branch, Kyoto, Japan. (No longer in existence.)
NIMR	National Institute for Medical Research, London, England.
NIRD	National Institute for Research in Dairying, Shinfield, Reading, Berkshire, England.
NISL	Noda Industrial Science Laboratory, Noda <i>or</i> Chiba, Japan.
NIST	National Institute of Science and Technology.
NIVM	National Institute of Veterinary Medicine, Brno, Czechoslovakia.
NJES	New Jersey Agricultural Experiment Station, New Brunswick, N.J. 08903 U.S.A.
NLABS(QM)	Pioneering Research Laboratory, U.S. Army Natick Laboratories, Natick, Mass. 01760 U.S.A.
NML	An acronym of unknown derivation appearing in U.S. Patent 3,826,714 (July 30, 1974).
NPN	Department of Agricultural Chemistry, Nagoya University, Chikusa-ku, Nagoya, Japan.
NRC	National Research Council, 100 Sussex Drive, Ottawa 2, Ontario, Canada K1A 0R6. <i>Also</i> NRC Canad. <i>and</i> NRCC. <i>or</i> National Research Centre, Ministry of Scientific Research, Sh. El-Tahir., Dokki, Cairo, United Arab Republic.
NRC Canad.	<i>See</i> NRC.
NRCC	<i>See</i> NRC.

NRL	Neisseria Reference Laboratory, U.S. Public Health Service Hospital, Seattle, Wash. 98114 U.S.A.
NRRC	Northern Regional Research Center. See NRRL.
NRRL	Agricultural Research Culture Collection (NRRL), Fermentation Laboratory, Northern Regional Research Center, Agricultural Research Service, U.S. Department of Agriculture, 1815 N. University St., Peoria, Ill. 61604 U.S.A. (Formerly referred to as Culture Collection, Fermentation Laboratory, Northern Regional Research Laboratory.)
NRS	Collection of Nathan R. Smith, U.S. Department of Agriculture, Washington, D.C. 20520 U.S.A. <i>Also</i> at Agricultural Research Culture Collection (NRRL), Peoria, Ill. 61604 U.S.A. <i>and</i> IMRU.
NSM	National Science Museum, Tokyo, Japan.
NTCCI	National Type Culture Collection, Indian Institute of Science, Bangalore, India.
NTHC	Norse Technical Høgskoles Collection, Department of Biochemistry, Technical University of Norway, Trondheim MTH, Norway.
NTSU	Department of Biological Sciences, North Texas State University, Box 5218, North Texas Station, Denton, Tex. 76203 U.S.A.
NUFS	Faculty of Science, Nagoya University, Nagoya, Japan.
NURB	See NRRL.
NVRS	National Vegetable Research Station, Plant Pathology Section; Wellesbourne, Warwick CV35 9EF England.
NY	See NYBG.
NYBG	New York Botanical Garden, Bronx Park, New York, N.Y. 10458 U.S.A. <i>Also</i> as NY.
NYS DH	New York State Department of Health, Albany, N.Y. 12224 U.S.A.
NYU	New York University.
NZRCC	New Zealand Reference Culture Collection, Auckland, New Zealand.
OAC	Mycological Herbarium, Department of Botany, Ontario Agricultural College, Guelph, Canada.
OECD	Organization for Economic Co-operation and Development, Paris, France.
OEEC	Organization of European Economic Cooperation. Superseded by OECD.

OEU	Tennoji Branch, Osaka Kyoiku University (formerly Osaka University of Liberal Arts and Education), Minami-Kawabori-cho, 431 Tennoji-ku <i>or</i> Ikedashi, Osaka, 543 Japan. See <i>also</i> OUE. (OUE is usual siglum.)
OH	Botanical Institute, Hamburg, Federal Republic of Germany.
OHS	Public Health Laboratory Services <i>or</i> District Hygienic Stations, Czechoslovakia.
OIAB	Ohara Institute for Agricultural Biology, Kurashiki, Japan.
OKAYAMA	Department of Biochemistry, Okayama Medical School, Okayama, Japan.
OMC	Osaka Medical College, Osaka, Japan.
OMS	World Health Organization.
ONR	Office of Naval Research.
OPA	Faculty of Agriculture, Osaka Prefectural University, Osaka, Japan.
OPH	Osaka Prefectural Hospital, Osaka, Japan.
OR	Research Laboratories, N. V. Organon, Netherlands.
ORDA	Office of Recombinant DNA Activities, National Institutes of Health, Bethesda, Md. 20205 U.S.A.
ORL	Laboratory of Microbiology, Faculty of Science, 45-Orleans 02, Loiret, France.
ORTHO	Ortho Research Foundation, Raritan, N.J. 08869 U.S.A. <i>Also</i> Ortho Res. Found.
Ortho Res. Found.	See ORTHO.
OSDA	Department of Agronomy, The Ohio State University, 1885 Neil Avenue, Columbus, Ohio 43210 U.S.A.
OSU	Withycombe Hall, Oregon State University, Corvallis, Oreg. 97331 U.S.A. <i>or</i> Ohio State University, Columbus, Ohio 43210 U.S.A.
OTHS	See OUT.
OUE	See OEU <i>and</i> OUT.
OUS	<i>or</i> Faculty of Science, Osaka University, Osaka, Japan.
OUT	Faculty of Engineering, Osaka University, Yamadaue, Suita City, Osaka, Japan. <i>or</i> Department of Fermentation Technology, Osaka University, 9-chôme, Higashinodamachi, Miya-koshima-ku, Osaka, Japan.
OWMC	Department of Microbiology, Osaka Women's Medical College, Osaka, Japan.

OWU	Ohio Wesleyan University, Delaware, Ohio 43015 U.S.A.
PAC	Herbarium, University of Pennsylvania, University Park, Pa. 16802 U.S.A.
PAD	Institute and Botanical Garden, University of Padova, Padova, Italy.
Paris	Laboratory of Cryptogamy and Algology, National Museum of Natural History, Paris, France.
PATU	Laboratory of Plant Pathology, Faculty of Agriculture, Tokyo University, Tokyo, Japan.
PC	See LCP.
PCC	Purdue Culture Collection, Department of Biological Sciences, Purdue University, Lafayette, Ind. 47907 U.S.A.
PCI	Penicillin Control and Immunology Section, Food and Drug Administration, 7th and Jefferson Drive SW., Washington, D.C. 20204 U.S.A.
PD or P.D. or P-D or PD(D)	Plantenziektenkundige Dienst. Wageningen, Netherlands. or Park, Davis Culture Bureau, Parke, Davis & Company and Parke, Davis Research Laboratories, Joseph Campau at the River, Detroit, Mich. 48232 U.S.A.
PDD	Herbarium of Plant Diseases Division, Auckland, New Zealand.
PDDCC	Culture Collection of Plant Diseases Division, New Zealand Department of Scientific and Industrial Research, Auckland, New Zealand.
PDU	See PU.
PF	Charles Pfizer and Co., New York, N.Y. 10017 U.S.A.
Pfizer	Central Research, Charles Pfizer and Company, Eastern Point Rd., Groton, Conn. 06340 U.S.A.
PGMMS	Post Graduate Medical Military School, Sofia, Bulgaria.
PH	N. V. Philips Duphar, Apollolaan 151, Amsterdam, Netherlands. or Academy of Natural Sciences, Philadelphia, Pa. 19103 U.S.A.
PHL	Public Health Laboratory, Albany, N.Y. 12224 U.S.A.

PHLS	Public Health Laboratory Service, Central Public Health Laboratory, Colindale Ave., London, NW9, England.
	<i>or</i>
	Public Health Laboratory Service, England and Wales Headquarters, 24 Park Crescent, London W1N 4DA, England.
PIEM	Prague Institute of Epidemiology and Microbiology, Prague, Czechoslovakia.
PIL	Pest Infestation Laboratory, Slough, Buckinghamshire, England.
PIR	The N. Poushkarov Institute of Soil Science, 136 9 September Boulevard, Sofia, Bulgaria.
PIRI	Research Institute for the Pharmaceutical Industry, Budapest, Hungary.
PL	Mycothèque, Laboratory of Parasitology, Faculty of Medicine, Paris, France.
PLPH	Provincial Laboratory of Public Health, Edmonton, Alberta, Canada. <i>See also</i> UAMH.
Plymouth	Marine Biological Laboratory, Plymouth, England.
PMCC	Pharmaceutical Microbiology Culture Collection, Pharmaceutical Microbiology Laboratory, Pharmacy College, Baghdad University, Baghdad, Iraq.
PPLCAN	Plant Pathology Laboratory, Canada.
PQMD	<i>See</i> QM.
PR	Botanical Institute of the National Museum, Prague, Czechoslovakia.
Prag	Laboratory of Autotrophic Organisms, Czechoslovakian Academy of Sciences, Prague, Czechoslovakia.
PRE	National Herbarium, Pretoria, Union of South Africa.
PRI	Plant Research Institute, Ottawa, Ontario, Canada.
PRL	Prairie Regional Laboratory, Saskatoon, Saskatchewan, Canada.
PSA	Progetto Sistematica Actinomiceti, "P. Stazzi" Institute, Institute of Microbiology, University of Milano, Via Mangiagalli 31 <i>or</i> Via Celoria 10, Milano, Italy.
PSU	Pennsylvania State University, University Park, Pa. 16802 U.S.A.
PU	Purdue University, Lafayette, Indiana 47907 U.S.A. <i>Also</i> CCM <i>or</i> MDB.
PUO	Biologický ústav Lek., Fakulta Palackého University, Olomouc Czechoslovakia.
PZH	Collection of Cultures, Institute of Hygiene, Warsaw, Poland.

QEC	Queen Elizabeth College, London University, London, England.
QIMR	Queensland Institute of Medical Research, Herston Road, Herston, Brisbane, Queensland 4006, Australia.
QM	Pioneering Research Division, Quartermaster Research and Engineering Command, U.S. Army Natick Laboratories, Quartermaster Research and Development Center, Natick, Mass. 01760 U.S.A.; <i>or</i> Quartermaster Depot, U.S. Army, Philadelphia, Pa. 19104 U.S.A. <i>Also</i> PQMD, QMRDC, and QM QMRDC. (<i>QM is usual acronym for designation of cultures. The QM collection has been transferred to the Agricultural Research Culture Collection (NRRL), Peoria, Ill. 61604 U.S.A.). See NRRL.</i>
QM QMRDC	<i>See</i> QM.
QMRDC	<i>See</i> QM.
RAJ	<i>See</i> ARIN.
RBG	Royal Botanic Gardens, Kew, Surrey, England.
RCR	Rothamstead Collection of <i>Rhizobium</i> , Soil Microbiology Department, Rothamstead Experimental Station, Harpenden, Hertfordshire, England.
RCS	Imperial College of Science and Technology, London University, London, England.
RES	Rothamsted Experimental Station, Harpenden, Hertfordshire, England.
RH	Rudolph High Collection, George Washington University, Washington, D.C. 20006 U.S.A.
Rhone-Poulenc	<i>See</i> RP.
RI	Rockefeller Institute, New York City, N.Y. 10020 U.S.A.
RIA	Research Institute for Ampelology, Budapest, Hungary.
(PIA)	<i>or</i> U.S.S.R. Research Institute for Antibiotics, 115148 Nagatinskaya ul. 3a, Moscow M-198 115148 U.S.S.R. <i>Also</i> USSR RIA and VNIIA.
RIB	Research Institute of Brewing, Tax Administration Agency, 2-6 Takinogawa, Kita-ku, Tokyo 114, Japan. <i>Also</i> GIB and BSRI.
RIBM	<i>or</i> Research Institute, Borstel, Germany. Research Institute for Brewing and Malting, Lipová 15, Prague 2, Czechoslovakia.

RIDC	Research Institute for Distillery and Canning Industry, Miletičova ul. 14b, Bratislava, Czechoslovakia. See RIDCI.
RIDCI	Research Institute for Distillery and Canning Industry. See RIDC.
RIDPI	Research Institute of the Distillers and Preservation Industry, Prague, Czechoslovakia.
RIFY	Research Institute of Fermentation, Yamana-shi University, Kofu, Japan. See YFI.
RIIPD	Research Institute of Infectious and Parasitic Diseases, Medical Academy, Sofia, Bulgaria.
RIJPK	Rijksdienst voor de IJsselmeerpolders, (IJssel Lake Polders Development and Colonization Authority) Molenstraat 28, Kampen, Netherlands.
RIL	Ross Institute, London, England.
RIM	All-Union Microbiological Research Institute, Saratov, U.S.S.R.
RIMD	Research Institute for Microbial Diseases, Osaka University, Nishi-machi, Dôjima, Kita-ku or Yamadaue (Yamada-Kami), Suita City, Osaka, Japan.
RIMR	Rockefeller Institute for Medical Research. 66th St. and York Ave., New York, N.Y. 10021 U.S.A.
RIND	Research Institute for Natural Drugs. Prague, Czechoslovakia.
RIO	Research Institute, Canada Agriculture, University Sub P.O., London, Guelph, Ontario, Canada.
RIPC	Research Institute for Pharmaceutical Chemistry, Budapest, Hungary.
RIR	Research Institute of Radioelectronics, Sofia, Bulgaria.
	or
	Research Institute for Refrigeration, Bratislava, Czechoslovakia.
RIT	Recherche et Industrie Therapeutique, 13 rue du Tilleul, Genval, Belgium.
	or
	Rega Institute, University of Leuven, Minderbroedersstraat, 10, Leuven, Belgium.
RIVE	Research Institute for Viticulture and Enology. Matušková ul. 97, Bratislava, Czechoslovakia.
RIVM	Research Institute of Veterinary Medicine, Brno, Czechoslovakia.

RJ	Institute of Research Experimentation of Centro Sul (I.P.E.A.C.S), km 47-Via Campo Grande-ZC-26, GB, Brazil, S.A.
RJR	R. J. Reynolds Tobacco Company, Winston-Salem, N.C. 27102 U.S.A.
RLCC	Roussel Laboratories, Culture Collection, Microbiological Q.C., Roussel Laboratories Ltd., Kingfisher Drive, Covingham, Swendon, Wiltshire, England.
RLL	Research Laboratories, Lepetit S.p.A., Milano, Italy. <i>A/so</i> RLLM, Lep. and Lepetit.
RLLM	See RLL.
RML	Rocky Mountain Laboratory, Hamilton, Mont. 59840 U.S.A.
Roussel	Roussel Research Center (U.C.L.A.F.), 111 route de Noisy, Romainville, Seine, France. <i>A/so</i> UCLAF.
RP	Societe des Usines Chimiques, Rhone-Poulenc, 9 quai Jules Guesde, a Vitry s/ Seine F-94400 Seine or 22 Avenue Montaigne, Paris 8, France. DS is used as a sigla for strain designations. <i>A/so</i> Rhone-Poulenc and DS.
RPMI	Roswell Park Memorial Institute, 666 Elm St., Buffalo, N.Y. 14263 U.S.A.
RRIC	Rubber Research Institute, Ceylon.
RRIM	Rubber Research Institute, Malaya.
RSA	Rancho Santa Ana Botanic Garden, Claremont, Calif. 91711 U.S.A.
RTCI	Central Research Division, Research Laboratories, Takeda Chemical Industries, Ltd., 27 Dosho-machi, 2 Higashi-ku, Osaka, 532 Japan or 17-85, Jusohonmachi 2-chôme, Yodogawa-ku.
RTM	Research and Training Institute, Mlingano, Private Bag, Ngomeni, Tonga, Tanzania.
RU	Rockefeller University, New York, N.Y. 10021 U.S.A.
RUHH	MRC Experimental Radiopathology Unit, Hammersmith Hospital, London 12 OHS, England.
RUTGERS	Department of Plant Pathology and Mycology Rutgers University, New Brunswick, N.J. 08903 U.S.A.
S	Sankyo Co., Ltd., Japan. <i>or</i> Natural History Rijksmuseum Avd., Stockholm, Sweden.

SAG	Collection of Algal Cultures, University of Göttingen, Göttingen, Federal Republic of Germany.
	<i>or</i> Schering, A. G., Berlin, Germany.
SAJ	Society for Actinomycetes, Japan, Department of Microbiology, Institute of Microbial Chemistry, 14-23, Kamiosaki 3-chôme, Shinagawa-ku, Tokyo 141, Japan.
SAN	Laboratory of Phytopathology, Institute of Plant Health, Paseo Colon 922, 2° Piso, Buenos Aires, Argentina, S.A.
SANDOZ	Sandoz, Basle, Switzerland.
SANK	See Sankyo.
Sankyo	Central Research Laboratories, Sankyo Company Ltd., 2-58, Hiro-machi, 1-chôme, Shinagawa-ku, Tokyo, 140 Japan. <i>Also</i> SANK.
SAOE	Agronomy and Enology Station, Bordeaux, France.
SARC	Microbiology Section, Plant Protection Research Institute, Private Bag 134, Pretoria, Union of South Africa.
SBMP	Research Laboratory of Dairy Science, Snow Brand Milk Products Company, Ltd., Sapporo, Japan.
SC	Culture Collection, Squibb Institute for Medical Research, E. R. Squibb and Sons, Division of Olin Mathieson Chemical Corporation, New Brunswick, N.J. 08903 U.S.A. <i>Also</i> Squibb <i>and</i> SQ.
	<i>or</i> Sumitomo Chemical Company.
SCH	Antibiotics Department, Schering Corporation, 60 Orange Street, Bloomfield, N.J. 07003 U.S.A. <i>Also</i> SCHER <i>and</i> Sch.
Sch	See SCH <i>and</i> Schenley.
Schenley	Schenley Laboratories, Inc., Lawrenceburg, Ind. 47025 U.S.A. <i>Also</i> as Sch.
SCHER	See SCH.
SCIBP	Special Committee for the International Biological Program.
SEARLE	G. D. Searle and Co., Chicago, Ill. 60680 U.S.A.
SEATO	SEATO Medical Research Laboratory, Bangkok, Thailand.
SECS	Serdica State Economic Corporation, Sofia, Bulgaria.
SEFF	Fruittree Culture Substation, Farraouphila, Brazil, S.A.

SEMIA	Section of Agricultural Microbiology, Secretary of Agriculture, Porto Alegre Rs., Brazil, S.A.
SES	Sericultural Experimental Station, Tokyo, Japan.
SFC	Federal Station for Testing Cultures, Lausanne, Switzerland.
SFEV	Federal Station for Viticultural and Arboricultural Testing, Lausanne, Switzerland.
SFPA	Phytopathological Service, Secretary of Agriculture, AV, Julio de Castillos 585, Porto Alegre, Rio Grande do Sul, Brazil, S.A.
SFSU	San Francisco State University Herbarium, San Francisco, Calif. 94312 U.S.A.
SG	VEB Schott & Gen., Jena 69, East Germany.
SGC	General Water Society, Barcelona, Spain.
SHIO	See SRL.
SHIONOGI	
<i>or</i>	
Shionogi	See SRL.
SHTM	See LSH.
SIES	Shimane Industrial Experimental Station, Matsue, Japan.
SIF	Statens Institutt for Folkhelse, Oslo, Norway.
SIFA	Industrial Society for the Manufacture of Antibiotics, France.
SIFF	National Institute of Public Health, Oslo, Norway.
SIIN	State Institute for Immuno-preparations and Nutrient Media, Klement-Gotwald Allee 317-321, Berlin, Germany.
SIO	Scripps Institution of Oceanography, La Jolla, Calif. 92307 U.S.A.
SIR	Institute of Science and Industrial Research, Osaka, Japan.
SIRI	Sugar Industry Research Institute, Mauritius.
SISC	L.A. Tasassevich State Research Institute for Standardization and Control of Medical Biological Preparations, Moscow G-2, U.S.S.R.
SIW	Smithsonian Institution, Washington, D.C. 20560 U.S.A.
SKHIP (СХИП)	D. N. Pryanishnikova Agricultural Institute, 614000, Perm', U.S.S.R.
SKS	Stuttgart-Korntaler Collection, Mycological-Bacteriological Arbeitsgemeinschaft, Staudtstrasse 19, Korntal b. Stuttgart, Germany.
SKU	Faculty of Science, Kyoto University, Kyoto, Japan.

SMBA	Scottish Marine Biological Association, Dunstaffnage Marine Research Laboratory, P.O. Box No. 3, Ofan, Argyll PA34 4AD Scotland.
SMG	Sammlung für Mikroorganismen Göttingen, Cosslerstr. 16, 34 Göttingen, Federal Republic of Germany.
Smith	See NRS.
SMKU	School of Medicine, Keio University, Tokyo, Japan.
SOE	Servicio Oleicola, Encantado, Brazil, S.A.
Sörgel	Collection of G. Sörgel, Institute for Microbiology, Humboldt University, Kleinmachnow, East Germany.
SOU	Faculty of Science, Osaka University, Osaka, Japan.
SPL	Department of Bacteriology, State Laboratory for Soil and Crop Research, Lyngby, Denmark.
SP-WISC	School of Pharmacy, University of Wisconsin, Madison, Wis. 53706 U.S.A.
SQ	See SC.
Squibb	See SC.
SRI	The Scientific Research Institute, Ltd., Sumiki Laboratory, Tokyo, Japan.
SRL	Shionogi Research Laboratory, Shionogi and Co., Ltd., 12-4, Sagisu, 8-chôme Fukushima-ku or 2407 Sagisu-kamidori, Fukushima-ku, Osaka, 553 Japan. Also Shionogi, SHIONOGI, and SHIO.
SRMS	Station of Research and Soil Microbiology, 7 rue Sully-21-Dijon, France.
SRS	Sericultural Research Station, Ales, France.
SS	See SSIC.
SSES	Sericultural Experiment Station, Taitama Prefecture, Japan.
SSIC	State Serum Institute, Copenhagen, Denmark.
STMPR	School of Tropical Medicine, Puerto Rico.
STO	Sapporo Taxation Office, Hokkaido, Sapporo, Japan.
SU	Australian Inoculant Research and Control Service, Department of Agriculture, P.M.B. 10, Rydalmere, New South Wales 2116, Australia.
SVÚ	State Veterinary Laboratories, Czechoslovakia.
SY	Research Laboratories, Syntex, S.A., Mexico, D.F.
SYRF	Herbarium, College of Environmental Science and Forestry, State University of New York, Syracuse, N.Y. 13210 U.S.A.

TA	Bacteriology Laboratory, Department of Agriculture, Launceston, Tasmania, Australia.
TAKEDA <i>or</i> Takeda	Research Laboratories, Takeda Chemical Industries, Ltd., Juso-Nichino-cho, Higashi-yodagawa-ku, Osaka, Japan.
TAU	Tokyo Agricultural University, Tokyo, Japan.
TBRI	Tokyo Biochemical Research Institute 2-593, Takadaminami-cho, Toshima-ku, Tokyo, Japan.
TC	Thaxter Collection, Farlow Herbarium, Harvard University, Boston, Mass. 02115 U.S.A. <i>or</i> Department of Biological Sciences, Technological College, Prague, Czechoslovakia.
TCCJMI	Type Culture Collection, John McCormick Institute, Chicago, Ill. 60604 U.S.A. (Forerunner of ATCC.)
TDEL	Technical Development Establishment Laboratory, Kanpur, India.
TH	Technical High School, Delft, Netherlands.
THLMD	Laboratory for Microbiology, Technical High School, Delft, Netherlands.
THU	Department of Fermentation Technology, Hiroshima University, 3-chôme, Senda-cho, Hiroshima-city, Japan.
TI	Herbarium of the Department of Botany, Faculty of Science, University of Tokyo, Tokyo, Japan.
TIT	Laboratory of Biological Chemistry, Tokyo Institute of Technology, Ohkayama 1, Meguro-ku, Tokyo, 152 Japan.
TJM	Tokyo Jikeikai Medical School, Tokyo, Japan.
TKA	Tokai-Kinki National Agricultural Experiment Station, Tsu, Japan. <i>A/so</i> TNAES.
TKU	Faculty of Technology, Kyoto University, Kyoto, Japan.
TL	Treub Laboratory, Boger, Indonesia. <i>or</i> Treub Laboratory, Buitenzorg, Java.
TLM	Tokyo-to Laboratory for Medical Sciences, Tokyo, Japan.
TMC	Trudeau Mycobacterial Culture Collection, Mycobacterial Culture Collection, National Jewish Hospital and Research Center, 3800 East Colfax Ave., Denver, Colo. 80206 U.S.A. (Formerly Trudeau Institute, Saranac Lake, New York, N.Y.)
TNAES	See TKA.
TO	Botanical Institute, University of Turin, Turin, Italy.

TOT	Laboratory of Applied Microbiology, Faculty of Agriculture, Tottori University, Japan.
TPI'	Tropical Products Institute, 56-62 Gray's Inn Road, London WC1, England.
TRIC	Tea Research Institute, Ceylon.
TRL	Timber Research Laboratory, Johannesburg, Union of South Africa.
TRTC	Department of Botany, University of Toronto, Toronto, Ontario, Canada. or University of Toronto Cryptogamic Herbarium, University of Toronto, Toronto, Ontario, Canada.
TSCHA (ЦЧА)	See TSKHA.
TSES	Taiwan Sugar Experimental Station, Taiwan, China.
TSGNKI (ЦГНКИ)	Tarsevicha Central Government Scientific Institute, Sivtsev-Vrazhek, 41, Moscow, U.S.S.R.
TSKHA (ЦХА)	K. A. Timiryazeva, Moscow Order of Lenin Agricultural Academy A-8, ul. Timiryazeva, 51, Novoe Shosse, Moscow, U.S.S.R. A/so TSCHA (ЦЧА).
TSKVI (ЦКВИ)	Central Scientific-Research Dermatological-Venereal Institute, Ministry of Public Health, 107076, ul. Korolenko, 3, Moscow B-76, U.S.S.R.
TSM	National Science Museum, Tokyo, Japan. A/so NSM.
TSMP (ЦМП)	V. V. Dokuchaeva, Central Museum of Soil Science, Birzhevoy Proezd. 6, Leningrad, B-164, 199164 U.S.S.R.
TSNIIMOD (ЦНИИМОД)	Central Scientific-Research Institute of Mechanical Cultivation, Laboratory of Proving Grounds, Tests and Antiseptics, 141500 Solnechogorsk, obl., ul. Lesnaya, Moscow, U.S.S.R.
TSNIIMS (ЦНИИМС)	Central Scientific-Research Institute of the Butter and Cheese Industry, g. Uglich, Yaroslavsky obl., Krasnoarmeisky Bul. 152620 ul. 19, U.S.S.R.
TSNIISK (ЦНИИСК)	V. A. Kucherenko, Central Scientific-Research Institute of Building Construction 109389, 2-ya Institutskaya ul., 6, Moscow Z-389, U.S.S.R.
TSURUMI	Tsurumi Chemical Research Laboratories, Yokohama, Japan.
TU	See MTHU.

TUAT	Faculty of Agriculture, Tokyo University of Agriculture & Technology, Fuchu, Japan.
TUF	Bacterial Laboratory, Tokyo University of Fisheries, Tokyo, Japan.
U	Department of Microbiology, Agricultural College, Ultuna S-75007, Uppsala 7, Sweden. or Botanical Museum and Herbarium, Utrecht, Netherlands.
UA	Agricultural Chemistry of Soil, University of Arizona, Tucson, Ariz. 86721 U.S.A.
UAB	University of Aston in Birmingham, Birmingham, England.
UAMH	Mold Herbarium and Culture Collection, University of Alberta, Edmonton, Alberta, Canada.
UB	Botanical Garden, Ernst-Moritz-Arndt University, Greifswald, East Germany. or Institute of Organic Chemistry, University of Basle, Basle, Switzerland.
UBC	University of British Columbia, Canada or Culture Collection, Department of Botany, University of British Columbia, Vancouver 8, British Columbia, Canada.
UC	Department of Bacteriology, University of California, Davis, Calif. 95616 U.S.A. or Institute of Plant Pathology, Universita Cattolica del S. Curoe, Piacenza, Italy. or University of Colorado, Denver Center, Denver, Colo. 80202 U.S.A. or Culture Collection, The Upjohn Company, Kalamazoo, Mich. 49001 U.S.A. Also Upjohn.
UCBD	Biochemistry Department, University of California, Berkeley, Calif. 94720 U.S.A.
UCBPP	Department of Plant Pathology, College of Natural Resources, Agricultural Experiment Station, University of California, 147 Hilgard Hall, Berkeley, Calif. 94720 U.S.A.
UCCA	Division of Bacteriology, Agricultural Experiment Station, College of Agriculture, University of California, Davis, Calif. 95616 U.S.A.

UCH	School of Medicine, University of Chicago, Chicago, Ill. 60637 U.S.A.
	<i>or</i>
	Department of Bacteriology, University Col- lege Hospital Medical School, University Street (Gower Street), London, England.
UCLAF	See Roussel.
UCST	Department of Microbiology, Institute of Medi- cal-Biological Sciences, University of Con- cepción, Cassilla 272, Concepción, Chile, S.A.
UCT	Department of Fermentation, University of Chemical Technology, Prague, Czechoslo- vakia.
UCW	Department of Agricultural Botany, University College of Wales, Penglais, Aberystwyth, Wales.
UD	Culture Collection of Hydrocarbon Utilizers and Suspect Utilizers, Department of Biol- ogy, University of Dayton, Dayton, Ohio 45409 U.S.A.
	<i>or</i>
	Department of Food Science and Technology, University of California, Davis, Calif. 95616 U.S.A.
UEM	See IEM.
UEM	See IEM.
UEMP	Regulations Epidemiology and Microbiology, Prague, Czechoslovakia.
UFC	United Fruit Company, Norwood, Mass. 02062 U.S.A.
UG	University of Göttingen, Göttingen, Federal Republic of Germany.
UGS	University of Geneva, Ginebra, Switzerland.
UHJP	Hebrew University, Jerusalem, Palestine.
UI	University of Illinois, Champaign-Urbana, Ill. 61801 U.S.A.
	<i>or</i>
	University of Indiana, Bloomington, Ind. 47401 U.S.A.
	<i>or</i>
	College of Pharmacy, University of Iowa, Iowa City, Iowa 52240 U.S.A.
UIFI	The Ukranian Research Institute of Food In- dustry, Kharkov, Ukr., S.S.R.
(УИФИ)	
UJEP	University of J. E. Purkyně, Brno, Czechoslo- vakia. Also see PU.
UkrIM	Institute of Microbiology and Virusology, Acad- emy of Science 252143, ul. Zabolotnogo, 59, Bol'shaya Zhitomirskaya 28, Kiev, Ukr.S.S.R.
(УкрИМ)	

UkrNIPP (УкрНИЛЛ)	Ukranian Scientific-Research Institute 31000, Pishchevoy Promyshiennosti, Sumskaya 3, Klochkovskaya, 368 Kharkov, GSP, Ukr.S.S.R.
UL	University of Louvaine, Louvaine, Belgium.
ULM-KU	Institute of Medical Microbiology, Charles University, Prague, Czechoslovakia.
UM	University of Minnesota, Minneapolis, Minn. 55455 U.S.A.
UMCK	University of Microbial Cultures, Kumasi, De- partment of Biological Sciences, University of Science and Technology, Kumasi, Ghana.
U.Md.	University of Maryland, College Park, Md. 20740 U.S.A.
UMH	University of Missouri Herbarium, Columbia, Mo. 65201 U.S.A.
UNC	Chair of Agrarian and Industrial Microbiology, Faculty of Agrarian Science, National Univer- sity of Cuyo, Mendoza, Argentina, S.A.
UNCC	J. M. Couch Culture Collection, University of North Carolina, Raleigh, N.C. 27514 U.S.A.
	<i>or</i>
	<i>Actinoplanaceae</i> Culture Collection of Univer- sity of North Carolina, Chapel Hill, N.C. 27514 U.S.A.
UNDP	United Nations Development Program.
UNEP	United Nations Environmental Program.
UNESCO	United Nations Education, Scientific and Cul- tural Organization.
UNIDO	United Nations Industrial Development Organ- ization.
UNL	Department of Plant Pathology, University of Nebraska, Lincoln, Nebr. 68583 U.S.A.
UNT	Institute of Microbiology, National University of Tucumán, Ayacucho 482, San Miguel de Tucumán, Argentina, S.A.
UNUT	Department of Microbiology, The Medical School, University of Newcastle upon Tyne, Newcastle upon Tyne NE1 7RU, England.
UO	University of Oglethorpe, Atlanta, Ga. 30319 U.S.A.
UP	University of Pavia, Pavia, Italy.
UPA	University of Pennsylvania, Philadelphia, Pa. 19174 U.S.A.
Upjohn	See UC.
UPS	Institute for Systematic Botany, Uppsala, Sweden.
UQ	Department of Microbiology, University of Queensland, Brisbane, Australia.

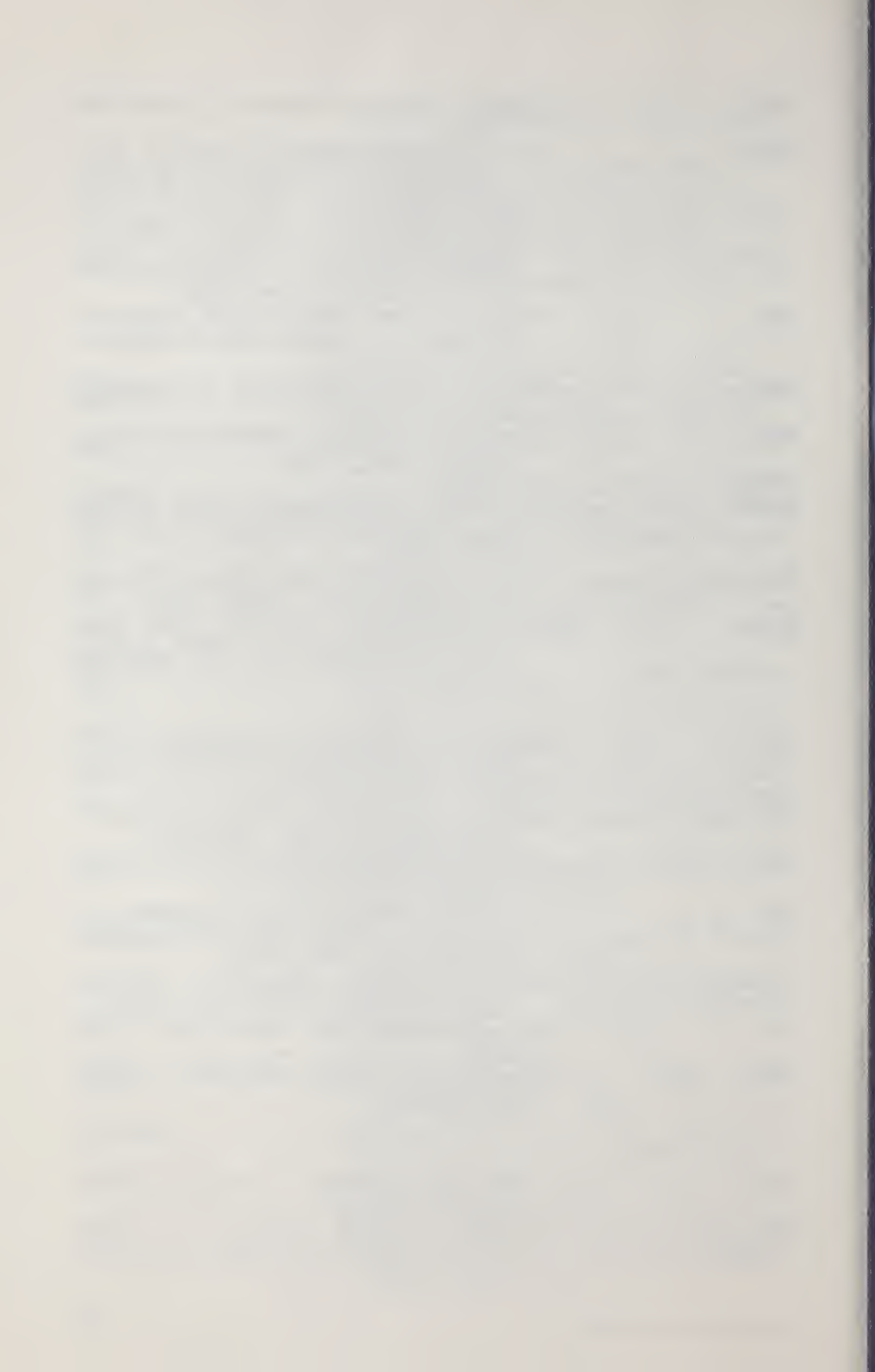
UQM	Culture Collection, Department of Microbiology, University of Queensland, Brisbane, Australia
URM	See IMUFPe.
USAMSGS	U.S. Army Medical Services Graduate School, Washington, D.C. 20012 U.S.A.
USDA	United States Department of Agriculture, Washington, D.C. 20250 U.S.A. or Plant and Entomological Sciences, Beltsville Agricultural Research Center, ARS, USDA, Beltsville, Md. 20705 U.S.A. (Formerly Plant Industry Station.)
USDI	United States Department of the Interior, Washington, D.C. 20242 U.S.A.
USFB	Faculty of Biology, University of Sofia, Sofia, Bulgaria.
USFCC	United States Federation for Culture Collections.
USMA	University of Sheffield, Sheffield, England.
USMH	University of Sheffield, Mycological Herbarium, Sheffield, England.
USOL	Institute of Sera and Vaccines, Prague, Czechoslovakia.
USPH	See USPHS.
USPHS	United States Public Health Service. Also USPH.
USSB	Department of Microbiology, University of Agricultural Sciences, Bangalore-24, India.
USSR, ARI (YCCP, АРИ)	See ARI.
USSR IPP (YCCP ИПП)	The U.S.S.R. Research Institute for Plant Protection, Leningrad, U.S.S.R. See also VIZR.
USSR RIA (YCCP РИА)	See RIA.
UT	University of Trujillo.
UTMC	Myxomycete Collection, University of Texas, Austin, Tex. 78712 U.S.A.
UU	Department of Microbiology, University of Umea, Umea, Sweden.
UW	University of Waterloo, Waterloo, Canada or Yeast Culture Collection, Australian Wine Research Institute, Waite Road, Urrbrae, South Australia; Private Mail Bag, Glen Osmond, South Australia 5064 (formerly, Waite Institute Yeast Culture Collection, The Australian Wine Research Institute). or University of Wisconsin, Madison, Wis. 53706 U.S.A.

- UWA** Department of Soil Science and Plant Nutrition, Institute of Agriculture, University of Western Australia, Nedlands, Western Australia 6009, Australia.
- UWCA** College of Agriculture, University of Wisconsin, Madison, Wis. 53706 U.S.A.
- UWO** University of Western Ontario Culture Collection, Botany Department, University of Western Ontario, London, Ontario, Canada.
- UWSM** Department of Microbiology, School of Medicine, University of Washington, Seattle, Wash. 98105 U.S.A.
-
- VA**
(BA) Veterinary Academy, Ministry of Agricultural Economics, 109378, Kuz'minskaya ul. 23, Moscow ZH-278, U.S.S.R.
- VEB** Research Laboratories, VEB Jena Pharm., Jena, East Germany.
- VFB** Veterinary Faculty, University of Agriculture, Brno, Czechoslovakia.
- VI** Veterinary Institute, Sofia, Bulgaria.
- VIZR**
(ВИЗР) All-Union Institute for Plant Protection, ul. Gertsena, 42, 19000 Leningrad, U.S.S.R.
See also USSR IPP.
- VKF** Veterinary Faculty, University of Agriculture, Kosice, Czechoslovakia.
- VKM**
(VKM) All-Union Collection of Nonpathogenic Microorganisms. Institute of Microbiology, Academy of Sciences, Profsoyuznaya 7-a, Moscow 117312, U.S.S.R. *Also as* INMI, VKMW *and* IMAN.
- VKMW**
See INMI *and* VKM.
- VNIFF**
(ВНИФФ) All-Union Scientific-Research Institute of Phytopathology, St. Golitsino, Moscow, U.S.S.R.
- VNIIBakpreparatov**
(ВНИИБакпрепаратов) All-Union Scientific-Research Institute for Plant Protection by Microbiological Methods and Bacteriological Preparations, 105122, Konyushkovskaya ul. 31, Moscow E-122, U.S.S.R.
- VNIIGenitika**
(ВНИИГенетика) All-Union Scientific-Research Institute of Genetics and Selection of Industrial Microorganisms. 113545, Moscow, U.S.S.R.
- VNIIGidroliz**
(ВНИИГидролиз) All-Union Scientific-Research Institute for Hydrolysis of Vegetable Materials. 190000, Pudozhskaya ul. 7, Leningrad, U.S.S.R.
- VNIIMP**
(ВНИИМП) All-Union Scientific-Research Institute for the Dairy Industry, 113093, Lyusinovskaya ul. 35, Moscow M-93, U.S.S.R.

VNIIM VASCHNIL (ВНИИМ ВАСЧНИЛ)	All-Union Scientific Research Institute s.ch., Microbiology, VASCHNIL, Moscow, U.S.S.R.
VNIIs/khM (ВНИИс/хм)	All-Union Scientific Research Institute of Agri- cultural Microbiology, 109000, ul. Gertsena, 42, Leningrad, U.S.S.R. A/so VNIIs/khM-L. See VNIIs/khM.
VNIIs/khM-L (ВНИИс/хМ-Л)	
VNIIs/khM-M (ВНИИс/хМ-М)	All-Union Scientific-Research Institute of Agri- cultural Microbiology, Konyushkovskaya, d. 31, Moskovskoe Otdelenie, Moscow, U.S.S.R.
VNIISP (ВНИИСП)	All-Union Scientific-Research Institute of the Alcohol and Liqueur Industry, 109033, Samo- katkaya ul., 46, Moscow, ZH-33, U.S.S.R.
VNIISViV (ВНИИСВиВ)	All-Union Scientific-Research Institute for Hor- ticulture, Viniculture and Winemaking, Min- istry of Agricultural Economics. 380015, Tbilisi 15, Georg. SSR.
VNIISViV MoldSSR (ВНИИСВиВ МолдССР)	All-Union Scientific-Research Institute for Hor- ticulture, Viniculture and Winemaking. 227000, Fruktovaya ul. 14, Kishiner, Mold. SSR.
VNIIViV (ВНИИВиИ)	All-Union Scientific-Research Institute for Winemaking and Viniculture "Magarch," 334200, ul. Kirova 25, Yalta, U.S.S.R. or Moscow Filial, 121471, ul. Ryabinovaya, 53, Moscow G-471, U.S.S.R.
VNIIVS (ВНИИВС)	All-Union Scientific-Research Institute of Vet- erinary Sanitation. 123022, Zvenigorod- skoe Shocce, 5, Moscow D-22, U.S.S.R.
VNIMI (ВНИМИ)	All-Union Scientific-Research Institute of the Dairy Industry, Lyucinovskaya, 35, Moscow, U.S.S.R.
VNIVI (ВНИВИ)	All-Union Scientific-Research of Vitamins In- stitute, Novokuznetskaya, d.7, Moscow, U.S.S.R.
VPI	Anaerobe Culture Collection, Virginia Poly- technic Institute and State University, P.O. Box 49, Blacksburg, Va. 24060 U.S.A.
VRI	Veterinary Research Institute, Brno, Czecho- slovakia.
VSB (ВСБ)	All-Union Scientific-Research Institute for the Biosynthesis of Protein Substances, 109004, Bol'shaya Kommunisticheskaya ul. 27, Moscow ZH-4, U.S.S.R.
VSCHT	Faculty of Chemistry, Technical University, Prague, Czechoslovakia.
VT	Fungus Culture Collection, Virginia Polytech- nic Institute and State University, Blacks- burg, Va. 24060 U.S.A.

VUHEM	Army Research Institute for Hygiene, Epidemiology and Microbiology, Prague, Czechoslovakia.
VUKP	Research Institute for Distillery and Canning Industry, Prague, Czechoslovakia.
VUL	Department of Veterinary Pathology, University of Liverpool, Liverpool, England.
VUPT	Research Institute for Food Technology, Prague, Czechoslovakia.
W	Natural History Museum, Vienna, Austria.
WACRI	Cocoa Research Institute of Ghana. (Formerly West African Cocoa Research Institute.)
WADC	Wright Air Development Center, Dayton, Ohio 45433 U.S.A.
WAIFOR	West African Institute for Oil Palm Research.
WB	Department of Bacteriology, College of Agriculture, University of Wisconsin, Madison, Wis. 53706 U.S.A.
WC	Waksman Collection, Waksman Institute of Microbiology, Rutgers University, New Brunswick, N.J. 08903 U.S.A.
Wellcome	See WRL.
WES	Woburn Experimental Station, Bletchley, Bucks, England.
WFEB	Worcester Foundation for Experimental Biology, Shrewsbury, Mass. 01545 U.S.A.
WFPL	Western Forest Products Laboratory, Department of the Environment, Canadian Forestry Service, Vancouver, British Columbia V6T 1X2, Canada.
WHO	World Health Organization, Avenue Appia, 1211, Geneva, Switzerland.
WHO/CCBC	See BGSC.
WINDSOR	Culture Collection, University of Windsor, Windsor, Ontario, Canada.
WIPO	World Intellectual Property Organization.
WISC	Wisconsin Strain, University of Wisconsin, Madison, Wis. 53706 U.S.A.
WKS	Waksman. See WC.
WLRI	Warner Lambert Research Institute, Morris Plains, N.J. 07950 U.S.A.
WMS-DB	Department of Bacteriology, Westminster Medical School, London, England.
WRAIR	Walter Reed Army Institute of Research, Washington, D.C. 20012 U.S.A.
WRL	Burroughs Wellcome Research Laboratories, Beckenham, Langley Court, Kent, England. Also Wellcome.

WRRC	Western Regional Research Center. See WRRL.
WRRL	Western Regional Research Laboratory, Agricultural Research Service, U.S. Department of Agriculture, Albany, Calif. 94710 U.S.A. (Formerly referred to as Western Marketing and Nutrition Research Division or Western Utilization Research and Development Division.) Also as WRRC and WURB.
WS	Collection of the Bacteriological Institute of the Technical University, Munsh, Germany at Weihenstephan.
WSF	Sigla of unknown derivation in Mycologia 63(1): 118-131 (1971).
WTU	Herbarium, University of Washington, Seattle, Wash. 98105 U.S.A.
WURB	See WRRL.
WUSM	Department of Microbiology, School of Medicine, Washington University, St. Louis, Mo. 63130 U.S.A.
WVU	Anaerobe Collection, West Virginia University, Morgantown, W. Va. 26506 U.S.A.
Wyeth	Wyeth Laboratories, Inc., 611 East Nield Street, West Chester, Pa. 19380 U.S.A.
YCC	Yeast Culture Collection, Department of Food Technology, University of California, Davis, Calif. 95616 U.S.A.
YFI	Yamanashi Fermentation Institute, Yamanashi University, Kofu, Japan. See RIFY.
YIT	Acronym of unknown derivation in U.S. Patent 4,087,559 (May 2, 1978).
YMC	Yamaguchi Medical College, Abe, Japan.
YP	Tokyo Institute, Yamanouchi Pharmaceutical Company, Ltd., Tokyo, Japan.
YPMC	Microbial Institute, Yamaguchi Prefectural College of Medicine, Tokuyama, Japan.
YU	Yale University, New Haven, Conn. 06520 U.S.A.
YUK	Faculty of Engineering, Yamanashi University, Kofu, Japan.
ZIKL	Zavod za Ispitivanje e Kontrolu Liekova, Zagreb, Yugoslavia.
ZIL (ЗИЛ)	Zoological Institute, Academy of Science, 199164, Universitetskaya nab., 1, Leningrad V-164, U.S.S.R.



UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
NORTHERN REGIONAL RESEARCH CENTER
1815 NORTH UNIVERSITY STREET
PEORIA, ILLINOIS 61604
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300



POSTAGE AND FEES PAID
U.S. DEPARTMENT OF AGRICULTURE
AGR 101